

## **MISSION**

The mission of the U.S. Environmental Protection Agency is to protect human health and to safeguard the natural environment—air, water, and land—upon which life depends.

## EPA's purpose is to ensure that:

All Americans are protected from significant risks to human health and the environment where they live, learn and work.

National efforts to reduce environmental risk are based on the best available scientific information.

Federal laws protecting human health and the environment are enforced fairly and effectively.

Environmental protection is an integral consideration in U.S. policies concerning natural resources, human health, economic growth, energy, transportation, agriculture, industry, and international trade; and these factors are similarly considered in establishing environmental policy.

All parts of society—communities, individuals, business, state and local governments, tribal governments—have access to accurate information sufficient to effectively participate in managing human health and environmental risks.

Environmental protection contributes to making our communities and ecosystems diverse, sustainable and economically productive.

The United States plays a leadership role in working with other nations to protect the global environment.

## STRATEGIC GOALS

- 1. Clean Air
- 2. Clean and Safe Water
- 3. Safe Food
- 4. Preventing Pollution and Reducing Risk in Communities, Homes, Workplaces, and Ecosystems
- 5. Better Waste Management, Restoration of Contaminated Waste Sites, and Emergency Response
- 6. Reduction of Global and Cross-Border Environmental Risks
- 7. Expansion of Americans' Right-to-Know About Their Environment
- 8. Sound Science, Improved Understanding of Environmental Risk, and Greater Innovation to Address Environmental Problems
- 9. A Credible Deterrent to Pollution and Greater Compliance with the Law
- 10. Effective Management
- \* Reflects 1997 Strategic Plan goal language, under which FY 2000 performance was conducted. Goal language has since been updated.



#### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

THE ADMINISTRATOR

March 1, 2001

The President
The White House
Washington, DC 20500

Dear Mr. President:

I am pleased to present the Environmental Protection Agency's *Fiscal Year 2000 Annual Report*. Under the authority of the Reports Consolidation Act of 2000, this report consolidates several reports to provide a comprehensive look at EPA's programmatic, managerial, and financial activities over the past fiscal year. This report meets the requirements of the Government Performance and Results Act, the Federal Managers Financial Integrity Act, the Agency portion of the Inspector General Act Amendments, the Government Management Reform Act, and the Chief Financial Officers Act.

Over the past three decades, our nation has realized tremendous progress in our common mission to preserve and protect our environment and the health of all Americans. Today, millions of Americans are breathing cleaner air, drinking safer water, eating food that is free from pesticide residues, and are living in communities that are protected from toxic chemicals. We have seen that environmental protection and economic prosperity can and do go hand-in-hand.

Building upon the progress we have made, we are now ready to enter a new era of environmental policy—an era that requires a new philosophy of public and private stewardship and accountability. In the years ahead, EPA will work to advance our nation's environmental protection goals by enhancing cooperation among all stakeholders. We are committed to forging stronger partnerships among citizens, government, and business that are built on trust, cooperation, and shared goals to achieve measurable results. We will work closely with our federal, state, tribal, and community partners to profit from their expertise and unique experience to provide the flexibility needed to develop innovative and workable solutions to environmental problems. To meet and exceed our shared goals, we will place greater emphasis on market and incentive-based solutions such as emissions trading. We will base our policies and decisions on sound science and meaningful peer review. Finally, we will work to promote compliance with environmental standards and to fulfill our responsibility to the American people for enforcing environmental laws and regulations.

The information provided in this report will help us assess the progress we have made thus far, determine our priorities and goals for the coming years, and ensure sound planning and budgeting decisions to address the challenges that lie ahead. We look forward to working with all Americans—citizens, government, business, the scientific community—in a commitment to achieving a safe and healthy environment for ourselves, our children, and the generations to come.

Sincerely yours,

Christine Todd Whitman

Enclosure

## **EPA'S FY 2000 ANNUAL REPORT**

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## **PREFACE**

The U.S. Environmental Protection Agency (EPA) has prepared the following report to present a comprehensive picture of the Agency's performance during fiscal year (FY) 2000. Unlike EPA's Fiscal Year 1999 Annual Performance Report, which was designed specifically to meet the requirements of the Government Performance and Results Act (GPRA), the Fiscal Year 2000 Annual Report addresses reporting requirements under GPRA as well as under several other management statutes—the Federal Managers Financial Integrity Act, the Inspector General Act Amendments, the Government Management Reform Act, and the Chief Financial Officers Act—as allowed by the Reports Consolidation Act of 2000. Therefore, this consolidated annual report not only represents a step toward the government-wide goal of streamlining management reporting but also allows the Agency to present to Congress and the American public a fuller, more comprehensive picture of its FY 2000 progress and accomplishments, both programmatic and financial.

Taken as a whole, the sections that follow summarize the progress EPA and its federal, state, tribal, and local government partners have made over the past year toward ensuring a clean, healthy environment for all Americans and explain how the Agency has used taxpayers' dollars effectively and responsibly to do so. Section I provides a general overview of EPA's performance during FY 2000, in terms of both the Agency's environmental and human health protection initiatives and its management and financial activities. This "Overview and Analysis" highlights selected accomplishments, summarizes the insights EPA managers have gained from their review of FY 2000 performance, and discusses how the lessons the Agency has learned from its experience in FY 2000 might be applied to improve performance in FY 2001 and beyond.

Section II, "GPRA Performance Results," reviews the results EPA and its partners have achieved under the Agency's FY 2000 annual performance goals. It also provides some additional FY 1999 performance data to supplement the information contained in the *Fiscal Year 1999 Annual Performance Report*. This section describes EPA's accomplishments and successes, and it explores those areas in which the Agency was unable to achieve the goals it had set for the year. EPA will use these performance measurement results to ensure that its environmental protection programs work as intended and to make adjustments and corrections to improve future performance.

The third and fourth sections of the report, "Management Accomplishments and Challenges" and "FY 2000 Annual Financial Statements," focus on how EPA manages its programs and activities and applies its resources to achieve environmental results. Section III discusses management integrity issues and management challenges and describes the results of the Agency's audit follow-up activities. Finally, Section IV includes EPA's FY 2000 annual financial statements, along with a message and analysis from EPA's Deputy Chief Financial Officer, supplemental information, and the Office of Inspector General Report.

## THREE DECADES OF ENVIRONMENTAL PROGRESS

#### 1970

- Twenty million people celebrate the first Earth Day.
- President Richard Nixon creates EPA with a mission to protect the environment and human health. The Agency is formed from parts of the Department of the Interior; the Department of Health, Education, and Welfare; the Department of Agriculture; the Atomic Energy Commission; the Federal Radiation Council; and the Council on Environmental Quality.
- Congress amends the **Clean Air Act** to set national air quality, auto emission, and anti-pollution standards.

## 1971

 Congress restricts use of lead-based paint in residences and on cribs and toys. (Lead-Based Paint Poisoning Prevention Act)

#### 1972

- EPA bans dichlorodiphenyltrichloroethane (DDT), a cancer-causing pesticide.
- The United States and Canada agree to clean up the Great Lakes, which contain 95 percent of America's fresh water and as of 2000 supply drinking water for 25 million people.
- EPA embarks on a major national commitment to build an advanced network of sewage treatment facilities to limit raw sewage flowing into rivers, lakes, and streams. (Federal Water Pollution Control Act)
- Congress requires more robust health and safety reviews of pesticides based on scientific evaluations. (Under amendments to the **Federal Insecticide, Fungicide and Rodenticide Act**)

#### 1973

- EPA begins phasing out lead in gasoline.
- EPA issues the first permit limiting a factory's polluted discharges into waterways. EPA now regulates water pollution from 45,000 industrial facilities, preventing one billion pounds of toxics from entering waterways each year. (Federal Water Pollution Control Act Amendments of 1972 regulating point source dischargers)

#### 1974

• EPA is authorized to regulate the quality and safety of the public drinking water supply, including requirements for physical and chemical treatment of drinking water. (Safe Drinking Water Act)

## 1975

Congress establishes fuel economy standards and EPA sets tailpipe emission standards for cars.

- President Gerald Ford signs the **Toxic Substances Control Act** which authorizes EPA to track industrial chemicals produced or imported into the United States.
- EPA begins phaseout of cancer-causing polychlorinated biphenyl (PCB) production and use.
- Congress passes the Resource Conservation and Recovery Act, regulating hazardous waste from its production to its disposal and providing incentives for recovery of valuable resources from solid waste.

- President Jimmy Carter signs the **Clean Air Act Amendments**.
- Congress passes the **Clean Water Act**, the result of amendments to the Federal Water Pollution Control Act of 1972 with a focus on toxic pollutants.

#### 1978

- Residents discover that Love Canal, New York, is contaminated by buried leaking chemical
  containers. The cleanup is completed through the Superfund Program in 1989, and the area is
  proclaimed habitable.
- EPA demonstrates scrubber technology for removing air pollution from coal-fired power plants.

## 1979

• EPA bans two herbicides containing dioxins, chemical compounds that are by-products of certain industrial activities that cause cancer and other adverse health effects.

#### 1980

• Congress creates Superfund (through the Comprehensive Environmental Response, Compensation, and Liability Act) to clean up abandoned hazardous waste sites.

## 1981

 EPA issues its first hazardous waste storage permit under the Resource Conservation and Recovery Act.

#### 1982

- Dioxin contamination forces the government to purchase homes in Times Beach, Missouri. The federal government and the responsible polluters share the costs of cleanups. By 1997 dioxin-contaminated soil and debris at Times Beach and 27 related sites in Eastern Missouri had been safely excavated and incinerated.
- A PCB landfill protest in North Carolina begins the environmental justice movement.

#### 1983

- Cleanup actions begin to rid the Chesapeake Bay of pollution stemming from sewage treatment plants, urban runoff, and farm waste.
- EPA encourages homeowners to test for radon gas, which is a leading cause of lung cancer.
- EPA issues the first Superfund National Priorities List, containing 406 sites nationwide.

### 1984

- Amendments to the Resource Conservation and Recovery Act require EPA to issue regulations
  for and to establish a program to control underground tanks containing petroleum, hazardous
  wastes, and other designated substances. (The Federal Hazardous and Solid Waste
  Amendments)
- EPA adopts the Indian Policy to explicitly address the role of tribes in environmental management. As of 2000, five of EPA's statutes specifically allow for EPA authorization of tribal programs or a substantial role for tribes.

- Scientists report that a giant hole in the earth's ozone layer opens each spring over Antarctica.
- EPA joins an international convention in Vienna calling for worldwide cooperative efforts to eliminate use of substances that deplete the ozone layer.

- Congress declares the public has a right to know when toxic chemicals are released into air, land, and water with the **Emergency Planning and Community Right to Know Act.**
- President Ronald Reagan signs the **Superfund Amendments and Reauthorization Act**, thereby increasing the size of the trust fund to \$8.5 billion, stressing permanent remedies, and increasing state involvement.
- Congress passes the Asbestos **Hazard Emergency Response Act**, and the Asbestos in Schools Program, protecting workers, the public, and children from exposure to asbestos.
- President Reagan signs Safe Drinking Water Act Amendments.

## 1987

- The United States and 28 other nations sign the Montreal Protocol, pledging to phase out production of chlorofluorocarbons (CFCs), a primary cause of stratospheric ozone depletion.
- EPA implements the National Estuary Program, bringing together federal, state, and local agencies to restore and protect estuaries serving as habitats and nursery grounds for two-thirds of the nation's commercial fish and shellfish.

#### 1988

- Congress bans ocean dumping of sewage sludge and industrial waste. (Ocean Dumping Ban Act)
- The Gulf of Mexico Program is established as a community-based, citizen-led program for the Gulf region.
- Congress accelerates the reregistration process for previously registered pesticides and authorizes the collection of fees to support reregistration activities. (Under amendments to the **Federal Insecticide, Fungicide and Rodenticide Act**)

## 1989

- The Exxon Valdez spills 11 million gallons of crude oil in Alaska's Prince William Sound. Exxon is fined \$1 billion, the largest criminal environmental damage settlement in history.
- EPA makes publicly available the first annual community right-to-know information on the location and nature of toxic chemical releases in communities around the country, through the new Toxics Release Inventory Program.

#### 1990

- President George Bush signs the **Clean Air Act Amendments**, which contain innovative approaches to pollution control and the promise of a renewed national commitment to environmental protection.
- Reducing Risk, a landmark report from EPA's Science Advisory Board, calls for the setting of
  national environmental priorities and greater use of science in decision-making on environmental
  regulation.
- President George Bush signs the **Pollution Prevention Act**, emphasizing the importance of preventing—not just correcting—environmental damage.

- Under EPA's coordination, all federal agencies begin using recyclable and recycled content products whenever possible.
- EPA launches Green Lights®, a voluntary program to encourage corporations, government agencies, and other institutions to install energy-efficient lighting.

- EPA signs partnership agreements with eight leading computer manufacturers to promote energyefficient personal computers and prevent air pollution associated with power generation through
  the Energy Star Program.
- Congress passes the **Indian Environmental General Assistance Program Act**. This legislation allows EPA to assist tribes in planning, developing, or establishing environmental protection programs through the administration of grants.
- EPA establishes a network of Environmental Finance Centers through cooperative agreements with universities. The Environmental Finance Center Network now consists of nine centers that assist customers in 40 states on such issues as rate setting, capacity development, brownfields redevelopment, affordability strategies, asset management, and capital budgeting.

## 1993

- EPA reports secondhand smoke contaminates indoor air, posing serious health risks to nonsmokers.
- EPA announces the Common Sense Initiative, an effort to shift environmental regulation to a sector-based approach.

#### 1994

- EPA launches its Brownfields Program to facilitate the cleanup of abandoned, contaminated sites for productive use.
- The Tribal Caucus of the Tribal Operations Committee is established to improve communication and build stronger partnerships with the Agency.

#### 1995

- EPA launches an incentive-based acid rain program to reduce sulfur dioxide emissions. Within 2 years, researchers report unprecedented reductions in acid rain.
- The National Environmental Performance Partnership System (NEPPS) gives states, and EPA a more flexible process for setting priorities, clarifying responsibilities, and making the most effective use of taxpayer dollars.
- Project XL (eXcellence and Leadership) is introduced. Under this initiative, companies, facilities, states, and localities develop innovative ways to achieve results that go beyond those required by environmental regulations.

- Congress enacts the amendments to the **Safe Drinking Water Act**. The amendments emphasize sound science and risk-based standard setting, small water supply system flexibility and technical assistance, community-empowered source water assessment and protection, public right-to-know, and water system infrastructure assistance through a multibillion-dollar state revolving loan fund.
- The Grand Canyon Transport Visibility Commission—consisting of states, tribes, and federal agencies (e.g., EPA and the Department of the Interior)—agree to improve visibility at the canyon, working with public interest and business groups.
- Congress establishes a health-based standard for pesticides used on food crops, with added protections for infants and children. (Food Quality Protection Act)

- An Executive Order is issued to protect children from environmental health risks, including childhood asthma and lead poisoning. EPA provides tips to help parents protect their children from environmental factors that can trigger asthma attacks.
- The United States and Canada sign an unprecedented agreement (the Binational Toxics Strategy) to essentially eliminate toxic substances from the Great Lakes.

#### 1998

• EPA requires states to reduce nitrogen oxide (NO<sub>x</sub>) emissions to reduce smog in the eastern United States. EPA encourages states to use an emission trading program called "cap and trade," which allows industries greater flexibility in choosing pollution controls because they can buy and sell market-based "credits" to reduce their NO<sub>x</sub> emissions.

#### 1999

• EPA issues new emissions standards for cars, sport utility vehicles (SUVs), minivans, and trucks, requiring them to be 77 percent to 95 percent cleaner starting with model year 2004.

## 2000

Marking the 30th anniversary of Earth Day, the Agency launches its new Internet home page at http://www.epa.gov, making environmental information more accessible to the tens of millions of visitors who visit the site each month. As part of the Earth Day-related launch, EPA regional offices around the country release reports detailing environmental progress and public health protection achieved over the past 30 years.

## FY 2000 ANNUAL REPORT

# OVERVIEW AND ANALYSIS

SECTION I



## **OVERVIEW AND ANALYSIS**

## **INTRODUCTION**

The U.S. Environmental Protection Agency (EPA) leads the nation's efforts to safeguard the natural environment and protect human health. The Agency is committed to ensuring that the American public has air that is safe to breathe, water that is clean and safe to drink, food that is free from dangerous pesticide residues, and communities that are protected from toxic chemicals. To accomplish this mission EPA set ten long-term strategic goals that identify the environmental outcomes or results the Agency is working to attain and the sound financial and management practices it intends to employ. Each year, as required under the Government Performance and Results Act (GPRA), EPA prepares an annual plan that translates the Agency's long-term goals and objectives into specific actions to be conducted and resources to be allocated for the fiscal year. EPA is accountable to the American public for achieving these annual performance goals for the protection of the environment and human health and for using taxpayers' dollars efficiently and effectively to do so.

A central purpose of GPRA is to gain better results from government programs by requiring federal agencies to define their performance goals and holding them accountable for achieving these goals. Successfully managing for results depends, in part, on strong links between annual and longer-term planning, budgeting, financial accounting, and performance results. EPA has gone farther than most other federal agencies in structuring its 1997 and 2000 revised Strategic Plans to reflect the full scope of the Agency's resources and workforce and in restructuring its budget to mirror its strategic goals and objectives. Under this approach EPA's strategic goals include both environmentally oriented goals, such as Clean Air and Safe Water, and functional goals, such as Sound Science and Effective Management, that are critical to the achievement of these environmental and human health outcomes.

In a further step to promote accountability, this report includes the Agency's audited financial statements, an independently reviewed accounting of expenditures to demonstrate that EPA has sound financial management practices in place. These financial reports provide not only the assurance that EPA is managing its resources soundly and efficiently, but also

information needed to ensure that EPA uses its resources strategically and effectively to achieve environmental goals.

Linking planning, budgeting, financial accounting, and performance assessment helps EPA focus resource allocation decisions on the environmental and human health results to be achieved, provides longer-term perspective and continuity for budgeting, and reinforces the importance of financial stewardship and fiscal integrity in achieving the Agency's mission. As a result EPA can demonstrate to Congress and the public how taxpayers' dollars are applied across the Agency's strategic goals and how they support the achievement of results.

EPA's Fiscal Year 2000 Annual Report serves several purposes. First it describes the progress that EPA, working with its federal, state, tribal, and local government partners, made toward the annual performance goals established in the Agency's Fiscal Year (FY) 2000 Annual Plan. Next it presents major management accomplishments and challenges EPA faced during the year and discusses Agency approaches and solutions. Finally it summarizes EPA's financial activities and achievements. As a whole the Annual Report provides an opportunity for the Agency to review its performance, highlight particularly noteworthy accomplishments, examine causes for missed goals or targets, and, most importantly, reflect on how EPA's experience in FY 2000 can shape efforts to achieve the Agency's strategic goals and objectives in the coming years.

This "Overview and Analysis" (which addresses requirements for a "Management's Discussion and Analysis" of the audited financial statements component of the Fiscal Year 2000 Annual Report)<sup>1</sup> is intended to provide a "big picture" view of EPA's performance and fiscal accountability over the year. In particular it describes the results achieved under the Agency's goals and objectives, reviews EPA's financial accomplishments, and summarizes actions EPA has taken or plans to take to address management problems. In addition it discusses significant factors that might

<sup>&</sup>lt;sup>1</sup>Because the *Fiscal Year 2000 Annual Report* consolidates a number of specific reports, several components of the "Management's Discussion and Analysis" are presented in greater detail elsewhere in this report. In particular EPA's mission statement and long-range goals appear at the front of the report, and an EPA organization chart is included as Appendix A. For a discussion of the Agency's performance goals, objectives, and results, see Section II. Management accomplishments and challenges are discussed in Section III. Financial statements, along with a discussion of systems, controls, and legal compliance, are presented in Section IV.

affect future Agency operations. This section is supplemented and supported by the more comprehensive, detailed information provided in the remaining sections of the Fiscal Year 2000 Annual Report.

## FY 2000 RESULTS

## **Summary of Performance Results**

During FY 2000 EPA and its partners made significant contributions to the establishment of a cleaner, healthier environment. As illustrated by the performance highlights that follow, in FY 2000 at least 91 percent of the American public served by community water systems received water meeting all health-based drinking water standards in effect since 1994. More of the American public breathed cleaner air, the result of significant reductions in harmful air pollutants. Food was safer, due to reduced use of high-risk pesticides and registration of reduced-risk pesticide ingredients. Completed construction at Superfund sites and cleanup and redevelopment of brownfields sites resulted in cleaner, safer, and healthier communities.

In FY 2000 EPA met 80 percent (51) of the 64 annual performance goals (APGs) for which data are provided in this report.<sup>2</sup> EPA also made significant progress toward the 13 APGs that were not achieved in FY 2000, and for these APGs the Agency is on track to meet its long-term goals and objectives.

During FY 2000 new performance data also became available for several of the 13 FY 1999 APGs for which there were delayed reporting cycles or targets set beyond FY 1999. For example, an additional 1.3 million people are living in residences with healthier indoor air. EPA also exceeded, by over 20 percent, its goal of documenting that controls are in place at hazardous waste facilities, helping to ensure that communities are protected from harmful pollutants. In summary EPA can now report achievement of 81 percent (50) of the 62 APGs for which the Agency has FY 1999 performance data. Delays in reporting cycles and targets set beyond FY 1999 continue to affect seven FY 1999 APGs.

Tables presenting EPA's detailed FY 2000 APG results are included in Section II at the end of each goal chapter. EPA continues to improve its performance

measurement capabilities and will modify some APGs in FY 2001 and FY 2002 to reflect more outcomeoriented measures and better performance data.

## **Highlights of FY 2000 Performance**

EPA's FY 2000 accomplishments reflect a variety of activities and initiatives. They represent progress made toward achieving the Agency's strategic goals; accomplishments that cut across individual goals, programs, or media; and achievements in financial management.

## Accomplishments Under Strategic Goals

- EPA issued a final rule for passenger vehicles (including sport utility vehicles) that will significantly reduce emissions of nitrogen oxides (NO<sub>x</sub>), a primary contributor to urban smog, by nearly 3 million tons per year by 2030. (Goal 1)
- EPA issued three final Maximum Achievable Control Technology (MACT) standards and proposed eight new standards that, when fully implemented, will reduce hazardous air emissions by an estimated 62,000 tons each year. Combined, all the MACT standards issued to date will reduce emissions by more than 1.5 million tons each year. (Goal 1)
- Phase II of the Acid Rain Program, which began in 2000, now requires reductions in sulfur dioxide (SO<sub>2</sub>) emissions from more than 2,500 electric utility units (gas-fired, oil-fired, and coal-fired) and reductions in year-round NO<sub>x</sub> emissions from approximately 750 coal-fired units. (Goal 1)
- Ninety-one percent of the population served by community drinking water systems received drinking water meeting all health-based standards that were in effect as of 1994, up from 83 percent since that time. (Goal 2)
- For the first time approximately 253 million Americans have access to annual consumer confidence reports on the quality and safety of their drinking water, as a result of the new Consumer Confidence Report rule. More than 100 million Americans are able to read their water quality reports online. (Goal 2)
- Implementation of Clean Water Action Plan activities resulted in the environmental improvement projects now under way in 324 highpriority watersheds. (Goal 2)
- Another two million people received the benefits of secondary treatment of wastewater in 2000,

<sup>&</sup>lt;sup>2</sup> EPA committed to a total of 73 APGs in its FY 2000 Annual Plan. Data for eight of these APGs will not be available until FY 2001 and beyond, and one APG has a target year that falls beyond FY 2000.

bringing the total number of people served by secondary wastewater treatment facilities to 181 million and achieving secondary treatment or better for nearly all of the population served by publicly owned treatment works. (Goal 2)

- EPA registered 16 reduced-risk pesticide active ingredients and reviewed 1,838 new chemical premanufacture notices for hazards to human health and the environment. (Goals 3 and 4)
- EPA reassessed 121 pesticide tolerances to ensure they met the Food Quality Protection Actmandated standard of a "reasonable certainty of no harm." (Goal 3)
- EPA implemented various risk-reduction steps such as restricting use, lowering or revoking tolerance levels, and phasing out or canceling certain uses for the pesticides azinphos methyl, methyl parathion, and chlorpyrifos. (Goal 3)
- Four hundred sixty-nine companies have committed to make screening-level hazard data on approximately 2,155 chemicals available by 2005. (Goal 4)
- Since the Superfund program began, EPA has completed construction at 757 private and federally owned sites to protect human health and the environment. During FY 2000 the Agency exceeded its target for Superfund constructions completed. (Goal 5)
- Through the third quarter of FY 2000 EPA's Brownfields Program provided grants to communities and states, leveraging \$2.8 billion in cleanup and redevelopment funds, generating an estimated 7,400 jobs benefitting disadvantaged communities, and funding more than 2,000 site assessments of potentially contaminated sites. The Brownfields Program was named one of the ten winners of the "Innovations in Government Awards, 2000" granted by Harvard University's John F. Kennedy School of Government, the Ford Foundation, and the Council for Excellence in Government. (Goal 5)
- Availability of water and sewer services in the U.S.-Mexican border area has significantly improved. Thirty-six projects certified by the Border Environment Cooperation Commission are under construction or have been completed. (Goal 6)
- Working in partnership with businesses, schools, state and local governments, and other

- organizations, EPA is on track to meet its FY 2000 target for reducing greenhouse gas emissions from projected levels by more than 58 million metric tons of carbon equivalent. (Goal 6)
- Reductions in domestic use of ozone-depleting hydrochlorofluorocarbons and domestic production and import of newly produced chlorofluorocarbons and halons are on track to meet targets set by the Clean Air Act Amendments for FY 2000. (Goal 6)
- EPA demonstrated a mid-size-chassis research vehicle that achieved 72 miles per gallon (gasoline equivalent) using a state-of-the-art diesel engine and a patented, EPA-invented hybrid drivetrain. (Goal 8)
- The Mid-Atlantic Integrated Assessment successfully demonstrated the monitoring designs and indicators developed from EPA's Ecological Research Strategy, resulting in the first statistically valid assessments of regional environmental conditions. (Goal 8)
- Enforcement actions brought by EPA reduced or prevented the emission and discharge of 334 million pounds of pollutants and required treatment of an additional 1.3 billion pounds of contaminated soils, sediments, or water; 61 percent of these enforcement actions required facilities to improve environmental management practices, which will reduce the likelihood of future violations. EPA's enforcement augments the efforts of states and tribes. Nationally states conduct the large majority of all federally related inspections and formal enforcement actions. (Goal 9)
- During FY 2000 an additional 430 companies made use of EPA's audit and self-disclosure policies, disclosing and correcting violations at 2,200 facilities. (Goal 9)
- EPA drafted its first strategic plan for investing in human resources, "Strategy for Human Capital," to focus management attention on human resource issues facing the Agency. (Goal 10)

## **Accomplishments Across Goals and Programs**

 The Office of Children's Health Protection developed the Children's Health Valuation Handbook to assist Agency economists in addressing children's health risks when they conduct cost-benefit analyses of regulatory options.

- EPA joined the Department of Housing and Urban Development, the Department of Health and Human Services, and other federal departments and agencies in an interagency strategy to eliminate childhood lead poisoning as a major public health problem by 2010.
- Two hundred twenty-eight facilities became charter members of the new National Environmental Performance Track Program, created to motivate and reward performance that exceeds federal environmental requirements.
- EPA expanded regulatory flexibility under Project XL (eXcellence and Leadership) to identify areas for improving federal environmental programs and policies and approved an additional 35 proposals, bringing the total number of projects being implemented to 50.
- To advance "smart growth" in communities, EPA provided funding, research, and technical assistance, as well as support for a national information sharing network.
- EPA created new web sites to expand public access to information about environmental permitting reforms and participation in EPA's voluntary partnership programs.
- In spring 2000 the Interagency Working Group on Environmental Justice released the *Integrated Federal Interagency Environmental Justice Action Agenda* to ensure that coordinated federal initiatives and resources are targeted to environmentally and economically distressed communities.
- EPA's National Environmental Justice Advisory Council published *Environmental Justice in the Permitting Process*. The first in a series, this report identifies essential factors to be considered in siting new pollution-generating facilities to ensure protection of all citizens.

## **FY 2000 Performance Issues**

Despite their best efforts, EPA and its partners were not able to meet all planned targets for FY 2000 APGs. In most cases the Agency does not expect the shortfall in meeting these APGs to compromise progress toward achieving the long-range goals and objectives.

For example, EPA changed the focus of underground storage tank compliance from simply having the required equipment to operating that equipment properly. As a result, states' reporting of compliance rates based on operational compliance led to a lower overall compliance figure but a better measure of environmental progress. In another case an extension of the public comment period delayed completion of the Exposure Factors Handbook, designed to provide guidance for assessing risks to children exposed to environmental contaminants, but permitted increased public involvement. Similarly, although EPA fell well short of its target for reassessing pesticide tolerances, the Agency made progress in developing a scientific approach to assessing cumulative risk which involved considerable stakeholder input and scientific peer review. Once implemented this approach will expedite Agency efforts to reassess pesticide tolerances.

In all EPA and its partners did not meet 13 of the 73 FY 2000 APGs. These APGs are associated with seven of EPA's ten strategic goals. The results tables included in Section II provide more complete information and show that the Agency made significant progress toward these goals.

## **Strengthening Program Integrity Through Improved Management**

Over the past decade EPA made substantial progress toward resolving programmatic and administrative issues that had the potential to affect the Agency's ability to achieve its mission. One of the most significant accomplishments is the progress the Agency has made in addressing General Accounting Office (GAO) concerns regarding the Superfund program. In FY 1990 GAO designated Superfund a high-risk area, citing recurring management problems that heightened the risk of fraud, waste, abuse, and mismanagement. After 10 years, in its January 2001 report, High-Risk Series: An Update, GAO removed the Superfund program from the high-risk list, indicating that EPA had made significant progress in addressing this longstanding management challenge and demonstrated a continuing commitment to these efforts.

Over the next several years EPA faces a number of management challenges, including two that the GAO January 2001 high-risk update identified as government-wide high-risk areas. The first issue, strategic human capital management, is characterized by what GAO regards as inadequate efforts to meet current and emerging needs in the areas of human capital planning, recruitment, and development. The second issue, information security, was first designated a government-

wide high risk area in FY 1997. Despite federal agencies' ongoing efforts to correct security deficiencies, GAO believes that critical government operations and assets continue to be vulnerable.

In its January 2001 report, Major Management Challenges and Program Risks: Environmental Protection Agency, GAO identified two additional management challenges specific to EPA: (1) improving environmental and performance information to set priorities and measure results and (2) strengthening EPA's working relationships with the states. EPA's Office of Inspector General (OIG) shares GAO concerns regarding both the high-risk issues and the management challenges. Section II, "GPRA Performance Results," specifically goal chapters 7 and 10, and Section III, "Management Accomplishments and Challenges," present a further discussion of these issues.

EPA's OIG provides Congress with an annual list of EPA's key management challenges based on OIG audits and also identifies candidate weaknesses for consideration during the Agency's annual assessment of management controls under the Federal Managers Financial Integrity Act. Section III includes OIG's statement on the Agency's most serious management and performance challenges and its assessment of Agency progress. OIG identified several additional areas it believes EPA should address in a timely manner to ensure the Agency can accomplish its environmental mission and achieve effective management. These issues include accountability, managerial cost accounting, quality of laboratory data, EPA's use of assistance agreements to accomplish its mission, the backlog of National Pollutant Discharge Elimination System Permits, and results-based information technology project management. Goal chapters 2, 7, and 10 in Section II and Section III provide further discussion of these issues.

Recognizing that one of the most critical challenges facing government today is preserving the public's trust in the integrity of government programs, EPA places a high priority on addressing GAO and OIG issues as well as issues identified by the Office of Management and Budget (OMB) and through internal Agency reviews and assessments. Section III contains a full discussion of the Agency's material weaknesses and major management challenges and provides a summary of corrective action strategies under way to resolve the issues. In addition to goal chapters 2, 7, and 10 identified above, goal chapters 5, 6, and 9 discuss Agency efforts to address major

management challenges that may affect the achievement of EPA's goals and objectives.

#### ADVANCING EPA'S WORK

## **Strengthening State and Tribal Partnerships**

Many of the advances in environmental protection made over the past year, highlighted in the list of accomplishments above and reflected in the chapters that follow, would not have been possible without the participation and support of the states. EPA and the states consulted extensively throughout the development of EPA's revised Strategic Plan, which was issued in September 2000, and the Agency worked closely with members of the Environmental Council of the States (ECOS) to facilitate state input on the goals, objectives, and text of the Plan.

During FY 2000 EPA and the states continued to strengthen their partnership to protect human health and the environment through the National Environmental Performance Partnership System (NEPPS). Under NEPPS EPA and states work together closely on all aspects of planning, priority-setting, and results-based management, including performance measurement, through the use of core performance measures (CPMs) to evaluate progress toward mutual program goals. CPMs are a limited number of program performance measures developed by EPA and ECOS to present a meaningful picture of each state's environmental quality and program effectiveness. CPMs are closely aligned with EPA's GPRA measures and similarly contain a mix of environmental indicator, outcome, and output measures. (Those CPMs associated with the Agency's APGs are noted in the tables for goal chapters 1, 2, and 5 in Section II of this report.) Thirty-four states and their EPA regional offices documented their partnership efforts with Performance Partnership Agreements.

In March 2000 EPA formally reaffirmed its commitment to the NEPPS principles of flexibility, innovation, and partnership. To demonstrate this commitment EPA designated leaders from each region and national program office to provide a broad, Agencywide perspective on how EPA and states can improve all aspects of NEPPS. EPA also finalized new grant regulations that lay the groundwork for negotiation of Performance Partnership Grants (PPGs). PPGs enable states as well as tribes to use grant funds flexibly to meet their specific environmental needs.

EPA has been working closely with State Environmental Commissioners to determine how EPA might better incorporate state priorities into EPA's planning and budgeting work and improve the Agency's understanding of the particular environmental challenges facing each state. In spring 2000 EPA Regional Administrators were asked to discuss state priorities with the Commissioners so that this information could inform the Agency's planning and budgeting work. EPA is now working with ECOS to develop an ongoing process to facilitate the receipt and consideration of state input into national priority-setting processes.

Over the past 10 years GAO has worked with EPA and the states to identify areas of concern, make recommendations, and track Agency progress in resolving the long-standing challenges associated with the EPA-state relationship. GAO concerns have centered around some fundamental disagreements between EPA and the states over respective roles, priorities among state environmental programs, and the appropriate degree of federal oversight. GAO believes EPA has taken positive steps in some areas that have improved cooperation with the states, resulting in more effective and efficient environmental protection.

EPA has also worked closely with tribal governments to identify priorities for Indian country, to improve management of environmental issues, and to develop tribal capacity to implement environmental programs. EPA's Indian Program involves significant cross-Agency and multimedia activities designed to ensure that our trust responsibility to federally recognized tribes is carried out. The Agency is committed to assuring protection of the environment and human health in Indian country in a manner that is consistent with the government-to-government relationship and that conserves cultural use of natural resources. The new PPG regulations mentioned above will expand the benefits of NEPPS, enabling tribes as well as states to use grant funds flexibly to meet their specific environmental needs. During FY 2000 EPA and tribes also made major advances toward strengthening their government-to-government relationship. For example EPA sponsored the 5th National Tribal Annual Conference on Environmental Management in Lincoln City, Oregon. The meeting brought tribes from across the nation together with a number of federal agencies to address a wide range of environmental issues. The growing partnership between tribes and EPA was further demonstrated this year through the Agency's

enhanced and extensive consultation with tribes on water quality standards in Indian country.

EPA has also worked with tribes to address a number of cross-media concerns. For example the Agency initiated training for tribal enforcement officials interested in obtaining or enhancing their federal inspection credentials. The development of accredited staff expands the Agency's ability to address priority issues. In addition FY 2000 saw the creation of the first Tribal Science Council as part of EPA's Science Advisory Board. This new collaborative body will enable tribes and EPA more effectively to address long-standing issues in Indian country, such as the need to further the science surrounding subsistence fishing and other exposure pathways.

## **Improving Results-Based Management**

In FY 2000 EPA completed its first full planning and accountability cycle under GPRA with the March 2000 submission of its first Annual Performance Report, presenting the results of EPA's FY 1999 performance to Congress and the public. In a series of ten goal meetings, senior Agency managers met with the Deputy Administrator to discuss the FY 1999 results and the lessons they prompted, mid-year performance toward FY 2000 APGs, progress toward long-term strategic goals, and work under way to improve performance measurement. In addition senior managers discussed the broader lessons learned from the Agency's experience with GPRA implementation to date and improvements to be made for the future. The discussion revealed that GPRA has had a positive impact on the culture of the Agency, specifically in helping managers to define success and the results of EPA's work. The focus on priority-setting and results has helped the Agency relate resources to accomplishments, find new ways to meet goals despite resource reductions, and address important data issues and the Agency's ability to measure results.

To further improvements in EPA's performance measurement, the Agency formed a performance measurement improvement team that conducted workshops with program offices to promote development of more outcome-oriented goals and measures. EPA applied many of the lessons learned from this effort in developing the framework for its revised Strategic Plan, which was issued in September 2000. The Agency is committed to developing APGs and performance measures that focus on outcomes;

linking performance with resources more closely; using information generated through planning, budgeting, analysis, and accountability activities to inform management decisions; and communicating the results of its efforts clearly to Congress and the public.

## **Developing Program Evaluation Capabilities**

While performance measurement generally describes what a program achieved—outputs or outcomes—during a given period, program evaluation can help explain these results. Program evaluation identifies areas needing improvement, better strategies for achieving established goals, and ways to improve data collection or measurement of program results. Performance measurement alone cannot always answer these questions.

To further improve its ability to assess progress, EPA has taken steps over the past year to increase the number and improve the quality of program evaluation activities within the Agency. EPA's OIG has reorganized and created an Office of Program Evaluation to conduct evaluations of EPA's programs. During FY 2000 EPA's Program Evaluation Network comprising EPA managers and staff with expertise in and responsibilities for program evaluation—continued to meet and to share information. In spring 2000 EPA presented two 1-day training sessions focusing on the fundamentals of program evaluation. The 77 headquarters and regional staff who participated in the training will continue to help build EPA's ability to conduct evaluations, improving the Agency's ability to assess progress toward its environmental goals. In FY 2000 the Agency also solicited program and regional office proposals for limited central funding of program evaluations. Four studies were selected for funding, including the Assessment of the Water Quality Standards process conducted under Goal 2.

## **DATA QUALITY**

EPA's FY 2000 performance data can be characterized as acceptably reliable and complete. In terms of data reliability, a significant number of APGs are Agency counts of administrative or programmatic outputs and are not subject to wide margins of error. In cases where counts involve major EPA data systems, however, the data are subject to Agency-wide data quality standards and periodically audited for accuracy and completeness. The Resource Conservation and Recovery

Act Information System (RCRAInfo), for example, adjusted the baseline number of facilities in the database after receiving new data from authorized states, thereby improving the reliability of the reported performance data. Performance data for several APGs are obtained by voluntary reporting, modeling, or extrapolating. The degree to which the quality of the data is affected by these data gathering techniques has not been quantified in most cases, although the reliability of the data can be estimated at least qualitatively. States and other external sources provide much of the data EPA uses to develop its performance data. For the more significant EPA databases, protocols are in place to check the data for errors. To a large degree, however, EPA must rely on the quality assurance/quality controls in place at the primary data source to ensure data accuracy.

Three EPA databases have been identified as Agency management weaknesses in FY 2000. These are the Permit Compliance System, RCRAInfo, and the Safe Drinking Water Information System. The Agency is implementing specific corrective action strategies for each of these databases and has established milestones for data quality improvements. As a result the quality of the performance data from these databases can be expected to improve significantly in the future.

EPA has taken several important steps to improve its data quality management. The Agency recently reorganized its information management activities into one office. It has adopted six new data standards to promote consistency in reporting and data integration. In addition the Agency is implementing a Central Data Exchange—a single portal for states and the regulated community reporting environmental information to EPA. These steps will help to improve the efficiency and reliability of EPA's data as well as detect and correct errors. In addition, with the goal of significantly improving data quality, EPA is allowing greater public access to Agency data, including enforcement and compliance information.

All of the Agency's 73 FY 2000 APGs are accounted for in the tables of results presented in each goal chapter in Section II. (These 73 APGs were first reported in the FY 2000 Final Annual Plan. They have since been revised to reflect final budget decisions and FY 1999 performance and presented in EPA's FY 2001 budget justification to Congress.) In the case of APGs for which performance data are not yet available, the

tables indicate when the Agency will have the data necessary to report performance.

## **FINANCIAL ANALYSIS**

#### **EPA's Financial Statements**

EPA's financial statements reflect the range of the Agency's financial activities over the course of a fiscal year and present a snapshot of its financial position at the end of that fiscal year. They are the culmination of many thousands of transactions and financial records, and on their accuracy and reliability EPA bases its assurance to the public that the Agency manages resources efficiently, effectively, and productively. EPA's OIG performs an annual audit of the full set of financial statements to determine whether the picture they present is a fair and accurate one, based on generally accepted accounting principles. When an agency's financial statements receive an unqualified or "clean" opinion from the auditors, this signals to the public the auditors' reasonable assurance of the agency's fiscal health at year's end. When auditors are unable to make a full assessment of financial statements because there are elements they cannot evaluate, they will render a qualified audit opinion. In such a case, auditors report that the statements represent an agency's financial circumstances fairly with the exception of individual elements that cannot be assessed. When auditors are unable to render an opinion on a set of financial statements because they are unable to make any kind of evaluation, they typically issue a disclaimer.

The auditors' annual check on financial management is fundamental to good management, and EPA recognizes it as an important indicator of the Agency's ability to account for taxpayer dollars and manage for results. EPA also values the resource information summarized in its financial statements as a basis for cost-benefit and trends analyses concerning the environmental results envisioned in EPA's strategic goals. For these reasons, no annual report of EPA's accomplishments would be complete without the inclusion of audited financial statements or some equivalent.

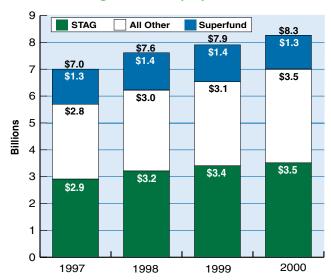
In response to process control concerns raised in the audit of EPA's FY 1999 financial statements, the Office of the Chief Financial Officer has worked closely with OIG to strengthen Agency financial management processes and financial statement preparation. EPA has analyzed in greater detail than ever before every element of its financial statements. EPA also framed new policies and instituted new procedures, improved quality control across the entire range of the financial statements, made selective use of automation in new areas, adopted new methodologies, and strengthened information security. EPA is pleased to report that this collaboration has enabled the Agency to achieve a "clean" audit opinion on its FY 2000 financial statements.

## **Budget Authority for FY 1997-FY 2000**

Budget authority is the authority provided by law to incur financial obligations, such as awarding contracts or grants. For FY 2000 EPA received a total of \$8.3 billion in budget authority. The "Budget Authority by Fiscal Year" chart provides a comparison of EPA's total budget authority for FY 1997 through FY 2000.

OMB issues EPA's budget authority in many accounts, consistent with appropriation law. The "Budget Authority" chart depicts the Superfund and State and Tribal Assistance Grants (STAG) accounts and characterizes other major accounts—such as the Environmental Programs and Management account and the Science and Technology account—under "All

## **Budget Authority by Fiscal Year**



Other." The Superfund category is a net amount in that it reflects transfers of Superfund authority to other accounts as directed by Congress.

## FY 2000 Obligations

An obligation is a legal responsibility on the part of the government to make a disbursement at a later date. For example an obligation is recognized when the

FY 2000 OBLIGATIONS BY GOAL (Dollars in Millions)													
Appropriation	Goal 1	Goal 2	Goal 3	Goal 4	Goal 5	Goal 6	Goal 7	Goal 8	Goal 9	Goal 10	Reim.	Other	Total Approp.
STAG	203	3098	0	94	64	52	0	0	71	0	0	0	3582
All Other	340	526	75	177	296	178	139	261	285	381	270	0	2928
Superfund	0	0	0	0	1563	0	3	3	15	57	123	700	2464
TOTAL	543	3624	75	271	1923	230	142	264	371	438	393	700	8974
Approp. = Appropriation STAG = State and Tribal Assistance Grants													

Reim. = Reimbursable

Other = Payment from general revenues to the Hazardous Substance Superfund

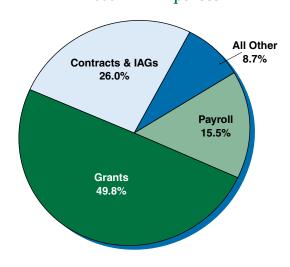
government awards a contract. The actual costs associated with the contract are recognized when the contractor delivers the requested goods or services.

The "FY 2000 Obligations by Goal" table presents data for each goal by appropriation. Obligations in this table are not the same as "costs," which are reported in Section IV under the Statement of Net Costs. Obligation totals in this table also differ from Agency financial statements because the obligation totals include EPA's Superfund transfer to other federal agencies. Each of the goal chapters that follow in Section II presents the total obligations for that goal in comparison to Agency's total obligations for FY 2000.

## FY 2000 Expenses

Expenses are EPA's costs for services rendered or activities performed. In FY 2000 EPA spent \$7.9 billion using current and prior year appropriation authority. Of this amount 75.8 percent was spent on contracts,

FY 2000 EPA Expenses

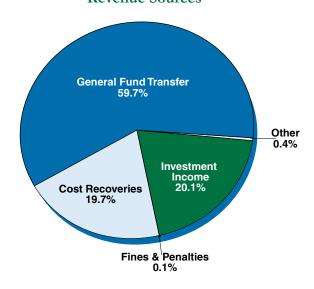


inter-agency agreements (IAGs), and grants. FY 2000 expenses are also displayed by strategic goal in the Statement of Net Costs in Section IV.

## **Superfund Financial Trends**

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), enacted in 1980, formally established the Superfund Program and the Hazardous Substance Response Trust Fund, now known as the Hazardous Substance Superfund (Trust Fund). Although CERCLA has not been

FY 2000 Superfund Trust Fund **Revenue Sources** 



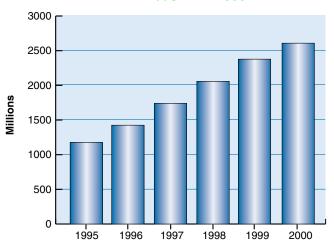
reauthorized since 1995, the Superfund Program continues to operate each year by way of annual Congressional appropriations from general fund transfer.

The Trust Fund, administered by the Bureau of Public Debt, U.S. Department of the Treasury (Treasury), is the primary financing source for the Superfund Program. For FY 2000 Treasury reports that the Trust Fund received approximately \$1.2 billion in receipts from the revenue sources shown in the accompanying chart.

The Superfund Program's authority to tax expired on December 31, 1995. Consequently the major revenue sources for the Trust Fund are cost recoveries; interest, fines, and penalties; income from Trust Fund investments; and general fund transfer. Due to diminishing revenues EPA has increased its efforts to conserve existing Trust Fund balances and replenish the Trust Fund with all eligible revenues. To accomplish these goals EPA has:

- Revised the indirect cost rate methodology for Superfund cost recovery to reflect the full costs of Superfund cleanup.
- Recovered \$230.4 million during FY 2000 as a result of accelerated efforts to pursue collection of cost recovery settlements and judgments.
- Reemphasized its "enforcement first" philosophy
  to compel Potentially Responsible Parties (PRPs)
  to clean up contaminated sites. By having PRPs
  perform cleanups, EPA can reduce related response
  and legal enforcement costs, resulting in cost
  savings to both taxpayers and the Trust Fund.

## Cumulative Superfund Costs Recovered FY 1995 - FY 2000



 With direction from Treasury, diversified the Trust Fund's investment portfolio and returned a higher rate of interest to the Trust Fund.

## **FUTURE TRENDS**

A number of current trends will have implications for the future success of EPA's programs. Should climate-change-driven weather extremes such as more frequent hot, dry summers increase, attainment of air quality standards might be more difficult despite the full implementation of emission control plans. High temperatures and bright sunlight, for example, could increase the formation of ozone. Droughts and floods, also more likely to increase with a warmer climate, could significantly affect the success of the Agency's water and waste programs. Floodwaters could disrupt hazardous waste sites and spread animal and other wastes. Drought conditions could preclude reliance on dilution to improve water quality and thus threaten the nation's water supply. EPA and its partners have established some pollution control strategies predicated on fairly typical temperature and precipitation regimes; unfortunately, those control strategies might be less likely to succeed in the face of increased climate and weather extremes.

Population growth, along with the attendant development of suburban and exurban areas, also has implications for environmental protection programs. Sprawl increases demands on transportation and can result in more people relying more heavily on private vehicles. Increases in vehicle miles traveled, coupled with the trend toward larger vehicles such as sport utility vehicles, can contribute to increased emissions of conventional pollutants and greenhouse gases like carbon dioxide and might affect EPA's air program. Apart from adding to air quality concerns, population growth also places increased pressure on the nation's infrastructure for providing clean and safe water. This concern is becoming especially apparent as the U.S. population grows in the southern and southwestern states, which have fewer water resources and often less highly developed water and wastewater treatment infrastructures than other states.

In conjunction with the growth of the overall population, America's population is aging. This change will inevitably lead to new and unexpected patterns of consumption and, therefore, to new patterns of pollution. For example, greater use of medications and other biologically active substances might affect the environment.

The current trend of general economic growth and increased consumer demands will also affect the success of EPA's programs across all media. If domestic manufacturing and production rise, waste streams might continue to change and require responses from EPA solid and hazardous waste programs. In the absence of cleaner processes and better controls, air and water emissions would tend to increase in response to this growth. Larger homes increase energy demands and can lead to growth in greenhouse gas emissions. Changes in producer and consumer behavior are also likely to influence the Agency's ability to achieve its objectives, for example, in the area of food safety.

Several technology changes might have significant impacts, both positive and negative, on the environment. Development and adoption of clean technology, such as hydrogen fuel cells, could reduce energy consumption and greenhouse gas emissions. Biotechnology, including the development of genetically modified organisms, might yield crops that can thrive without the use of fertilizers and pesticides. However, researchers continue to investigate the interaction of genetic engineering and other technologies with environmental factors. EPA's pesticide and industrial chemical programs may need to respond to advances in biotechnology.

The Internet and information technology are transforming public sector processes and the ways that agencies interact with their constituents and relate to one another. Government agencies at all levels are using technology to be more accessible, efficient, and responsive to their constituents. Prompted by the expectations of a citizenry that is growing accustomed to conducting business online, businesses seeking to reduce costs in a technology-driven marketplace, and Congressional efforts to reduce reporting burden, agencies are using the Internet and information technology to streamline processes, improve services, and integrate information. As e-commerce becomes fully entrenched in the everyday lives of the public, EPA will need to deliver customer services that will require integration across multiple departments and levels of government.

Clearly these and other social, economic, and technological trends and developments will influence the Agency's ability to achieve its goals and objectives.

## **LOOKING AHEAD**

EPA learned from its FY 1999 experience—through both the work it accomplished and the challenges it faced—and has made significant progress during FY 2000 in applying the principles of results-based management. The Agency advanced its efforts to set quantifiable, attainable goals and targets; to forecast external factors that might have an impact on program planning; to measure performance results more precisely; and to analyze more accurately the relationships among costs, activities, and results.

In setting future goals and targets EPA will focus on delivering environmental and human health outcomes and developing meaningful performance measures where possible. The Agency will strive to develop APGs that reflect progress made toward meeting long-term goals and that are more closely linked to environmental outcomes. For example APGs currently in place under the air pollution control program for ozone, particulate matter, and other pollutants enable EPA and states to measure actual improvements in air quality, rather than progress in program activities such as permits issued. EPA is making similar progress in the area of compliance and enforcement. For example during FY 2000 EPA established a baseline to measure the average length of time it takes for significant violators to return to compliance or enter into enforceable plans and agreements. Building on this effort, in FY 2001 the Agency will be able to assess its progress in decreasing the percentage of facilities that remain in significant noncompliance after 2 years.

As part of its performance assessment improvement effort, the Agency will continue to work with states to improve the CPMs that have been negotiated through NEPPS, both to realize improvements in its ability to measure outcomes and to maintain the close alignment of NEPPS and GPRA performance measures. EPA and states are particularly committed to increasing significantly the ratio of environmental outcome to output CPMs.

To measure environmental improvements and assess progress accurately, EPA and its partners need quality environmental information and the analytical tools to understand it. The Agency is working to ensure that it keeps pace with the rapid advances in information technology and can meet the growing demand for reliable environmental information. EPA is developing an Information Plan that assesses the Agency's environmental direction, establishes a framework for identifying and addressing information needs, and matches information and technology resources to those needs. In addition the Plan will establish processes for addressing data needs and identify potential data collection efficiencies and opportunities to leverage information resources. These initiatives will also support EPA's efforts to improve its trend data, so that the Agency may better assess progress toward long-term goals and provide a context for assessing annual results.

Collaboration with the Agency's federal, state, and tribal partners and with interested stakeholders will be critical to the success of these efforts. EPA will continue to depend on strong, effective partnerships to ensure progress toward the Agency's goals for protection of the environment and human health.

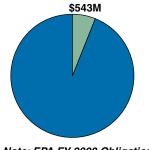
The chapters that follow in Section II present EPA's FY 2000 progress toward each of the Agency's ten long-term goals. Each chapter discusses the Agency's accomplishments, research contributions, and program evaluations, as well as the impact of FY 2000 results on the FY 2001 Annual Plan. As appropriate, chapters also discuss the Agency's progress in addressing significant management problems. Tables provided at the end of each chapter present information on the APGs that support each long-term goal. The chapters and tables together help to describe the results EPA and its federal, state, tribal, and local agency partners achieved during FY 2000 and to explain how these results will shape the Agency's future planning and performance.

## FY 2000 ANNUAL REPORT

# PERFORMANCE RESULTS

**SECTION II** 

## Goal 1 FY 2000 Obligations



Note: EPA FY 2000 Obligations were \$8,974 million

## **GOAL 1: CLEAN AIR**

The air in every American community will be safe and healthy to breathe. In particular, children, the elderly, and people with respiratory ailments will be protected from health risks of breathing polluted air. Reducing air pollution will also protect the environment, resulting in many benefits, such as restoring life in damaged ecosystems and reducing health risks to those whose subsistence depends directly on those ecosystems.

### **OVERVIEW**

Exposure to air pollution at certain levels is associated with numerous harmful effects to human health, including premature death, respiratory problems, heart and lung diseases, and cancer and other serious health effects such as reproduction or birth defects. Children may be at greater risk than adults because they are more active outdoors and their lungs are still developing. Senior citizens are also more sensitive to air pollution because they often have heart or lung diseases. EPA and its partners have made significant progress in protecting the health of people of all ages by dramatically reducing air pollution from various sources.

Air pollution, such as acid rain, ground-level ozone, and air toxics, can also significantly affect ecosystems.

#### **CLEAN AIR EFFORTS IN INDIAN COUNTRY**

EPA has built on its partnership with tribal governments and has made achievements in many areas, including providing resources to tribes to work on air quality planning, management, and control. More than 100 tribes now receive Clean Air Act funding. Sixty-seven tribes are actively involved in ambient monitoring, at least 30 are developing emissions inventories, 27 are working with EPA on major source permitting, 35 are conducting education and outreach activities, and several are actively participating in Regional Planning Organizations as they work to address regional haze. Also, in FY 2000 the tribes, Northern Arizona University Institute for Tribal Environmental Professionals, and EPA launched a new Tribal Air Monitoring Support Center in Las Vegas that will assist with building monitoring capacity among tribes.

For example, EPA has estimated that ground-level ozone reduces agricultural and commercial forest yields by \$500 million each year. Airborne release and subsequent deposition of nitrogen oxide (NO<sub>x</sub>) is one of the largest sources of nitrogen pollution in certain water bodies, such as the Chesapeake Bay. Overly abundant nitrogen can cause excessive growth of algae, which in turn can harm fish and shellfish and reduce the light available to aquatic vegetation and coral reefs.

#### **FY 2000 PERFORMANCE**

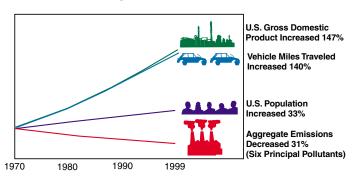
EPA devotes significant effort to meeting annual targets that support the longer term health and environmental outcomes and improvements that are articulated in the Clear Air goal. To achieve the goal of healthy clean air, EPA relies on the proactive cooperation of federal, state, local and tribal government agencies, industry, non-profit organizations, and individuals. Success is far from guaranteed even with the full participation of all stakeholders. Moving into the 21st century, EPA will be working with various stakeholders to encourage new ways to meet the challenges of "cross-regional" issues as well as to integrate programs to address holistically airborne pollutants.

## **Reducing Emissions of Criteria Pollutants**

Under the Clean Air Act (CAA), EPA establishes National Ambient Air Quality Standards (NAAQS) to protect human health, including the health of "sensitive" populations like asthmatics, children, and senior citizens. EPA also sets limits to protect public welfare, including protecting against degradation of ecosystems, vegetation, crops, and materials and preventing visibility impairment.

EPA has set national air quality standards for six principal pollutants (referred to as criteria pollutants): carbon monoxide (CO), lead (Pb), nitrogen dioxide (NO<sub>2</sub>), ozone, particulate matter (PM), and sulfur dioxide (SO<sub>2</sub>). Between 1970 and 1999, total emissions of the six principal air pollutants decreased 31 percent [state core performance measure (CPM) for all six criteria pollutants]. These improvements occurred simultaneously with significant increases in the nation's population, economic growth, and travel and are a result of effective implementation of clean air laws and regulations, as well as enhancements in the efficiency of industrial technologies.

## Trends in Emission Sources and NAAQS Pollution Emissions

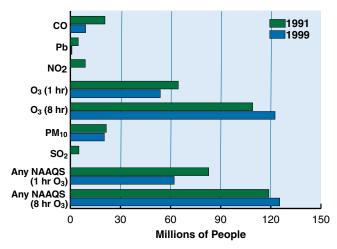


Further improvements in air quality are expected with the implementation of new regulations for passenger vehicles and trucks. In FY 2000 EPA finalized a rule for passenger vehicles, including sport utility vehicles, that requires these vehicles to be 77 to 95 percent cleaner for  $NO_x$  (a contributor to ground level ozone or smog, and nitrogen deposition in water bodies). The rule takes effect beginning with model year 2004 and will reduce  $NO_x$  by nearly 3 million tons per year by 2030. A rule for trucks, when fully implemented in 2030, will reduce  $NO_x$  emissions by 2.6 million tons per year.

In FY 2000 as the result of sustained improvements in air quality and the fulfillment of other CAA requirements, 13 additional areas, with a population of 5.2 million people, were found to have improved air quality enough to meet at least one of the standards for the criteria pollutants (some CPMs for criteria pollutants). Despite this progress in air quality improvement, more than 62 million people still live in counties with monitored pollution levels that do not meet one or more national air quality standards (this number does not consider the 8-hour ozone standard).

To address the persistent air pollution problems in those areas, EPA is working with the states, tribes, and local governments on additional strategies and has proposed a program to control regional haze, which is largely caused by particulate matter.

## Population in Counties with Monitored Levels of Pollutants Above the NAAQS



EPA and the states are continuing their multi-year effort to address the ozone transport problem by moving forward with plans to reduce NO emissions in the eastern portion of the country. In FY 1999 EPA finalized the "NO<sub>x</sub> State Implementation Plan (SIP) call," requiring states in the eastern portion of the United States to submit SIPs that reduce emissions of NO. In March 2000 a decision by the U.S. Court of Appeals for the District of Columbia Circuit largely upheld the NO<sub>x</sub> SIP call, remanding only a few issues back to EPA. In FY 2000 EPA developed a plan to implement the NO SIP call in accordance with the court decision. Nineteen states and the District of Columbia were required to submit, by October 30, 2000, plans achieving approximately 90 percent of the emission reductions required by the original NO<sub>x</sub> SIP call.

In FY 2001 EPA plans to begin the rulemaking process on the remanded issues. Full implementation of this SIP call, considering the intended revisions, would reduce total NO<sub>x</sub> emissions by nearly 1 million tons annually. In FY 2000, as a back-up to the NO<sub>x</sub> SIP call, EPA granted petitions filed by four northeastern states seeking to reduce ozone pollution through reductions in NO<sub>x</sub> emissions from other states. EPA is currently awaiting a decision from the D.C. Circuit regarding the legality of granting these petitions. The ozone pollution reductions from these actions will

provide cleaner air for more than 100 million people. In addition, these two actions will reduce acid rain and visibility problems. They will also protect water quality by reducing the amount of nitrogen deposition in water bodies.

In FY 2000 EPA continued the litigation on the legality of the July 1997 ozone and fine particle standards. The Supreme Court granted EPA's request for review of the D.C. Circuit decision that remanded the standards to EPA and heard oral arguments on November 7, 2000. The Court is expected to decide the case by the middle of 2001. Because of the litigation, EPA did not take any steps to implement the 8-hour ozone standard in FY 2000, although EPA is working with the states to determine appropriate boundaries for areas that are not attaining the 8-hour standard. To ensure a minimal, federally enforceable level of human health protection against ozone pollution, EPA reinstated the pre-1997 1-hour ozone standard in the summer of 2000.

The litigation has not affected efforts related to the fine particle standard. As was scheduled, EPA is working with states to collect data from the new fine Particle Monitoring Network to determine fine particle levels across the country. EPA is also continuing its review of the scientific studies on the health effects of fine particles for the 5-year review of the standard that is required by the CAA. EPA has stated that it intends to complete both efforts before beginning implementation of the fine particle standard.

In FY 2000 EPA also conducted various planning activities to support implementation of the regional haze rule by the states and tribes. The first state plans for reducing regional haze are due in the 2003 to 2008 time frame with full implementation expected by 2018. Regional haze, due to the presence of fine particles in air that scatter and absorb light effectively, impairs visibility over a large area. The Agency's activities include developing technical tools and guidance, expanding the Interagency Monitoring of Protected Visual Environments visibility monitoring network, providing funding and developing work plans for five regional planning bodies, and conducting specific work with the Western Regional Air Partnership on an annex to the recommendations of the Grand Canyon Visibility Transport Commission. These activities will help states achieve the national visibility goal Congress established when it amended the CAA in 1977.

## **Monitoring and Controlling Air Toxics**

Toxic air pollutants are those pollutants that cause or might cause cancer or other serious health effects, such as reproductive effects or birth defects, or adverse environmental and ecological effects. Some common toxic air pollutants are benzene (found in gasoline), perchloroethylene (emitted from some dry cleaning facilities), and methylene chloride (used as a solvent in some industries). Most air toxics originate from manmade sources, including mobile sources (e.g., cars, trucks, buses, construction equipment), stationary sources (e.g., factories, refineries, power plants), and indoor sources (e.g., building materials and some cleaning compounds). Air toxics are also released from natural sources like volcanic eruptions and forest fires.

Unlike the criteria pollutant program, an extensive nationwide monitoring network for air toxics does not yet exist. In FY 1999, however, EPA, with the assistance of state and local co-regulators, began developing a national strategy for monitoring toxic air pollutants. The Agency is beginning to implement that strategy. Specifically in FY 2000 EPA, the states, tribes, and local governments worked to develop criteria for monitoring and analyzing ambient air toxics. In addition four urban area pilot projects—Providence, Detroit, Tampa, and Seattle—were funded and they are expected to operate for 1 year. Six small city/rural pilot projects will also be established. This pilot phase, which was reviewed by the Agency's Science Advisory Board, is part of a larger, multiyear program to be used to generate information on the variability of ambient air toxics over time and geographic areas to guide the proper deployment of an air toxics monitoring network.

In addition the Agency is conducting a four-step National-Scale Air Toxics Assessment, as part of the Integrated Urban Air Toxics Strategy, that will focus on the 33 air toxics that present the greatest threat to human health in the largest number of urban areas. The assessment results can then be used to identify the areas of the country and pollutants for which further investigation is needed. The first two steps, completed in FY 2000, were to compile a national inventory of air toxics emissions from outdoor sources and to estimate ambient concentrations of air toxics across the contiguous United States using data from 1996. The last two steps, to be completed in early 2001 for peer review, are to estimate population exposures across the contiguous United States and to characterize potential

human health risk due to inhalation of air toxics, including both cancer and noncancer effects.

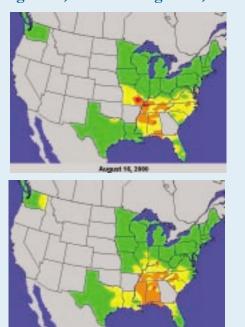
EPA has put in place important controls covering air toxics from fuels and engines and is continuing to take additional steps to reduce air toxics from vehicles. EPA anticipates that by 2020 there will be a 75 percent emissions reduction in key air toxics from highway vehicles from 1990 levels. In particular in FY 2000 the Agency finalized the rule that sets the standards for the next generation of cleaner-burning engines and gasoline for passenger vehicles, including sport utility vehicles, and finalized a similar rule for cleaner heavy-duty trucks and buses and their fuel. EPA also introduced a voluntary diesel retrofit program that encourages states, cities, and private companies to use modern emissions control technology on their older diesel engines, which can remain operable for 20 to 25 years. Two pilot retrofit projects are under way in Seattle and Washington, DC, and three more projects are planned. In addition to reducing air toxics, these regulatory and voluntary efforts will also reduce criteria pollutants.

Another program, the reformulated gasoline (RFG) program is helping to reduce pollution in the metropolitan areas of the country with the most difficult air quality problems. In 1995 EPA began work with the states to implement a two phased RFG program using gasoline blends to burn fuel more cleanly. During Phase I, which ended in 1999, emissions of benzene (a known human carcinogen) were reduced in major metropolitan areas by as much as 43 percent. Phase II, which began on January 1, 2000, should reduce vehicle emissions of volatile organic compounds by 27 percent, air toxics emissions by 22 percent, and NO<sub>x</sub> emissions by seven percent (http://www.epa.gov/oms/). Phase II will also reduce toxic emissions by about 24,000 tons per year in RFG areas, equivalent to eliminating the toxic emissions from more than 13 million vehicles. EPA estimates that the Phase I and Phase II RFG program will reduce smog pollutants by 105,000 tons per year, equivalent to eliminating the smog-forming emissions from more than 16 million vehicles. About 75 million people in 17 states are breathing cleaner air because of the RFG program.

EPA is nearing the end of the first phase of the two-phase process for regulating stationary source air toxic emissions that Congress established in the 1990 Amendments. In the first phase, air toxic emissions are to be reduced by requiring industry to do what is doable:

In a program that combines EPA's commitment to accurate, timely environmental information with cutting edge technology, AIRNOW displays the smog levels throughout the day and tracks changes hour by hour. AIRNOW presents the information in easy-tounderstand maps. "Real-time" data are available for 35 states and Washington DC. Air pollution forecasts for 135 cities appear in USA Today and on the Weather Channel. The goals of EPA's AIRNOW web site are to (1) provide real-time air pollution data in an understandable, visual format; (2) provide information about health and environmental effects of air pollution; (3) provide the public with information about ways in which they can protect their health and actions they can take to reduce pollution (http://www.epa.gov/ airnow).

## National Air Quality Maps August 16, 2000 and August 17, 2000



EPA was required to set industry-wide standards based on pollution control equipment that is already in use. In FY 2000 the Agency proposed eight of these Maximum Achievable Control Technology (MACT) standards covering 12 types of emission sources. The Agency also issued three final MACT standards for four source categories. These rules will reduce toxic emissions by an estimated 62,000 tons each year when fully implemented; together, once fully implemented, the toxics standards issued over the past 10 years will cut emissions of toxic air pollutants by nearly 1.5 million

August 17, 2000

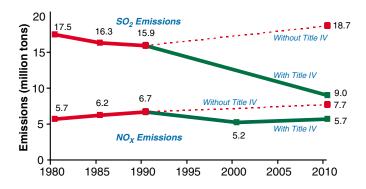
tons per year. EPA is also beginning the second phase of the two-phase process – determining whether there are remaining risks that require additional controls. In FY 2000 the Agency conducted 12 screening risk assessments on previously promulgated 2- and 4-year MACT standards and concluded that four source categories will need further assessments to determine whether additional regulations are needed. In December 2000 EPA issued a finding that mercury emitted from power plants is a human health concern. This triggered a requirement to issue a rule by 2004 to regulate mercury emissions from power plants.

## **Reducing Acid Rain**

Acidic deposition or "acid rain" occurs when emissions of SO<sub>2</sub> and NO<sub>3</sub> in the atmosphere react with water, oxygen, and oxidants to form acidic compounds. These compounds fall to earth in a dry form (gas and particles) or a wet form (rain, snow, and fog). Major human health concerns associated with exposure to fine particles include effects on breathing and the respiratory system, damage to lung tissue, and premature death. In the environment, acid rain raises the acid levels in certain soils and water bodies, making the water unsuitable for some fish and other wildlife; it also damages certain trees at some higher elevations. Acid rain is carried by the wind, sometimes across state and national borders. "In the United States, prior to the implementation of the NO, SIP call (which will not begin until 2004), electric utility plants that burn fossil fuels produce about 64 percent of annual SO, emissions and 26 percent of NO emissions.

The Acid Rain Program, as authorized by the Clean Air Act, is being implemented in two phases: Phase I

# Reductions in SO<sub>2</sub> and NO<sub>x</sub> Emissions from Utility Sources Following CAA Title IV Implementation



for SO<sub>2</sub> began in 1995 and targeted the largest and highest-emitting power plants, predominantly coal-fired units; Phase I for NO began in 1996. As the chart indicates, the programs have significantly reduced emissions from the 1990 baseline. Phase II for both pollutants began in 2000. The Acid Rain Program now covers more than 2,500 units and includes gas-, oil-, and coal-fired units. The Phase II units installed continuous emissions monitors and began reporting emissions to the Acid Rain Program in 1995. Required reporting of emissions from all affected units was needed for EPA to assess utilities' compliance with the program's reduced utilization provisions. It also ensured a smooth start-up of Phase II in 2000, when all affected units became subject to SO, emission reductions. Most coal-fired Phase II units also became subject to NO emission reductions in 2000. The transition to full program operation has progressed smoothly. In addition, the computer-based Allowance Tracking and Emissions Tracking Systems, which support the program and were enhanced in FY 2000, will be expanded in the next several years to support operations of the Ozone Transport Commission's NO Budget/ Multistate Emissions Trading Program in the Northeast.

## **SUMMARY OF FY 2000 PERFORMANCE**

EPA has made significant progress toward achieving its long-term goal of clean air for all Americans through successful and collaborative integration of regulatory and partnership activities. Final rules setting standards for cleaner burning engines and fuels, final rules for passenger vehicles including sports utility vehicles, proposal of eight and issuance of three MACT standards, and expansion of the universe of electric utility plants covered under the Acid Rain program all highlight the Agency's movement toward meeting its strategic clean air goal.

## RESEARCH CONTRIBUTIONS

### Criteria Pollutants

In FY 2000 EPA completed key research on an atmospheric model (the Community Multi-scale Air Quality model, or Models-3/CMAQ) that will allow state, tribal, and local air quality managers to more accurately forecast the benefits of alternative ozone, PM, and regional haze source controls. Models-3/

CMAQ simultaneously looks at ozone, PM, visibility, acid rain, and some toxics, as an aid in evaluating control strategies for one or several ozone precursors. EPA offices and regions are working together to encourage states to use the model for upcoming SIPs.

EPA continues to work with state and local agencies in all areas to develop strategies to help them maintain clean air or come into compliance while being sensitive to local economic and other issues. The Agency is required to examine the NAAQS every 5 years to ensure that they are protective of human health. Currently, EPA is working toward completing a review of the ozone and PM<sub>2.5</sub> standards by 2002. In addition, the draft plan for the Ozone Air Quality Criteria Document (AQCD) is nearly ready for release for public comment and Clean Air Scientific Advisory Committee (CASAC) review. This is an important milestone in the 5-year review of the tropospheric ozone NAAQS set by the Agency.

EPA leads research efforts to characterize human exposures to PM and to evaluate the biological mechanisms behind PM's respiratory and cardiovascular effects. PM-related research in FY 2000 included assessments to determine the best means to estimate health outcomes and the susceptibility of sensitive subgroups, including children and senior citizens. A recently completed exposure study indicates that exposure of senior citizens to PM creates health risks. Research in FY 2000 also included the evaluation of the role of various components of PM, such as transition metals, in producing toxicity. EPA is also conducting research to evaluate, improve, and develop control technologies for industrial and commercial sources. Results of these efforts will ensure that the Agency's review of the PM standard is based on the most up-to-date scientific standards available. Additional research focuses on measurements, methods, and models to support the review of the PM standard, including the evaluation of the Models-3/CMAQ model for PM, which the states can use to predict which reductions in emissions sources will likely achieve attainment of PM NAAQS. Also, in FY 2000, work continued on the second External Review Draft of the PM AQCD which will be released shortly for public comment and CASAC review.

#### **Air Toxics**

In FY 2000 EPA's air toxics research program developed and demonstrated new methods to assess

risks from urban toxics and conducted research to develop integrated control and pollution prevention approaches for source categories (such as utilities, waste combustors, and industrial boilers) that have the greatest adverse effect on urban air quality. Results of this research will support the Agency's efforts to develop strategies to reduce the risks posed by the multitude of hazardous air pollutants present in many urban areas across the United States.

## **PROGRAM EVALUATION**

The Benefits and Costs of the Clean Air Act (CAA). The CAA requires the Agency to complete periodic evaluations of the impact of the program. An EPA report to Congress entitled, The Benefits and Costs of the Clean Air Act (November 1999), estimated the benefits and costs of the 1990 Amendments (http://www.epa.gov/air/sect812/). The Agency has begun the process to update this report.

Air Pollution: Status of Implementation and Issues of the CAA Amendments of 1990. In response to a request from Congress, the General Accounting Office (GAO) issued a report (RCED-00-72) on the status of implementation of Titles I through VI of the 1990 CAA Amendments. This evaluation indicated that of the 538 requirements in those titles with deadlines prior to February 2000 or with no statutory deadlines, EPA met 409 requirements and the statutory deadline for 129 requirements. As part of the evaluation, GAO obtained views from stakeholders on what they considered the key issues regarding implementation of the 1990 Amendments. The stakeholders—state governments, local programs, industries, and environmental advocacy groups—often cited the following issues: the degree of flexibility allowed states and the regulated community to determine how they will achieve air quality improvements, the extent to which goals and requirements are clearly specified in the statute or regulations, and the adequacy of resources at the state and local levels to effectively implement and enforce the statute. This information will be considered in the reauthorization of the CAA. (http://www.gao.gov/ new.items/rc00072.pdf).

EPA's Mobile Source Emissions Factor Model. In 1998 in response to a request from Congress, the National Academy of Sciences established a committee to evaluate and develop recommendations for improving

EPA's mobile source emissions factor model, MOBILE. MOBILE is an EPA-developed model used by environmental and transportation agencies for estimating emissions from on-road motor vehicles for air quality planning purposes. In FY 2000 the committee issued its report, which included a number of recommendations for enhancing MOBILE and for improving the overall process for estimating mobile source emissions. EPA is addressing the recommendations as it develops a new version of MOBILE, which should be ready in 2001.

## ASSESSMENT OF IMPACTS OF FY 2000 PERFORMANCE ON FY 2001 ANNUAL PERFORMANCE PLAN

Goal 1 Annual Performance Goals (APGs) for FY 2001 reflect successful performance in FY 2000. For example, the FY 2001 APG for reduction in PM reflects achievement of the FY 2000 goal by an increase in the number of areas in which healthy air is maintained and the associated population in those areas newly designated as meeting the PM standards. This is also the case for the CO<sub>2</sub>, SO<sub>2</sub>, NO<sub>2</sub>, and lead reduction program. In setting APGs and targets for future years, the Agency will focus on developing outcome-based program goals where possible. Two areas in which the Agency currently has good outcome-based APGs are the NO<sub>x</sub> and SO<sub>2</sub> reduction programs, which are able to measure emission reductions.

Performance in FY 2000 also impacts broad program strategies for future years. The CAA provides a framework for achieving environmental results by setting specific targets for each program area. The Act identifies specific activities and establishes a multiyear schedule for carrying them out. Nationally thousands of air quality monitors provide the information that is the foundation for measuring program success. EPA has a wealth of trend data collected over 30 years for criteria pollutants; the Agency is now working toward a similar network for toxic pollutants. Building on the FY 2000 strategy developed with the states, EPA will work toward the deployment of a multi-year effort to generate information on the variability of air toxics over time and geographic area.

## TABLES OF RESULTS

The following tables of results includes performance results for the eight FY 2000 APGs that appear in Goal 1. In cases where the FY 2000 APG is associated with an FY 1999 APG, the table includes the FY 1999 APG below the FY 2000 APG for ease in comparing performance. Where applicable, the tables note cases where FY 2000 APGs are supported by state National Environmental Performance Partnership System (NEPPS) and CPMs. As described in more detail in Section I of the report (the Overview and Analysis), states use CPMs to evaluate their progress toward mutual program goals. Additionally, EPA is providing information on FY 1999 APGs for which data were not available when the FY 1999 report was published.

## FY 2000 Annual Report Annual Performance Goals and Measures - Table of Results

	00 Performance pals GOAL 1 - CLEAN AIR Other				
EV 200	00 ANNUAL PERFORMANCE GOALS AND MEASURES	FY 2	FY 2000		
1 1 200	OU ANNOAL FERI ORIMANCE GOALS AND MEASURES	Planned	Actual	Actual	
BY 2010, IMPROVE AIR QUALITY FOR AMERICANS LIVING IN AREAS THAT DO NOT MEET NAAQS FOR OZONE AND PARTICULATE MATTER.					
FY 2000 APG 1:	Maintain healthy air quality for 33.4 million people living in 43 areas attaining the ozone standard. ◆ Corresponds with FY 2000 NEPPS Core Performance Measure (CPM).	33.4 M	33.4 M	10	
(FY 1999)	Eight additional areas currently classified as non-attainment will have the 1-hour ozone standard revoked because they meet the old standard.			10	
Explanation:	Goal met. Maintained healthy air quality for 33.4 million people living in 43 areas meeting the ozone standard. One new area came into attainment and increased the number of people living in areas attaining the ozone standard by 1.7 million, resulting in a total of 35.1 million people living in a total of 44 areas designated to attainment.				
Data Source:	The Aerometric Information Retrieval System (AIRS) is composed of two systems: Air Quality Subsystem (AQS), which stores ambient air quality data to determine if nonattainment areas have the three years of clean air data needed for redesignation and Air Facility Subsystem which stores emissions and compliance/enforcement information for facilities. AIRS data are collected from the state and Local Air Monitoring Stations.				
	The Findings and Required Elements Data System (FREDS) is used to track progress of states and regions in reviewing and approving the required data elements of the State Implementation Plan (SIP). SIPs define what action a state will take to improve the air quality in areas that do not meet national ambient air quality standards.				
Data Quality:	Each State and Local Air Monitoring Station (SLAMS) is required to (1) meet network design and siting criteria, (2) provide adequate quality assurance assessment, control, and corrective actions functions, (3) ensure all sampling methods and equipments meet EPA reference or equivalent requirements, and (4) follow acceptable data validation and record keeping procedures. SLAMS are summarized and reported annually to EPA. SLAMS undergo system audits to review the overall air quality data collection activity for any needed changes or corrections. For AIRS potential data limitations are (1) incomplete or missing data, (2) inaccuracies due to imprecise measurement and recording, and (3) inconsistent or non-standard methods of data collection and processing. No external audit of AIRS has been done in the last three years. For FREDS the primary limitation is incomplete or missing data from the Regions. No external audit has been done on FREDS.				
FY 2000 APG 2:	Maintain healthy air quality for 1.2 million people living in 7 areas attaining the PM standards, and increase by 60 thousand the number of people living in areas with healthy air quality that have attained the standard. •• Corresponds with FY 2000 NEPPS CPM.	1.2 M 60,000	1.2 M 75,800		
(FY 1999)	Deploy particulate matter 2.5 ambient monitors including mass, continuous, speciation, and visibility resulting in a total of 1,500 monitoring sites.			1,110	
Explanation:	Goal met. Maintained healthy air quality for 1.2 million people living in seven areas attaining the particulate matter (PM) standard. Two new areas came into attainment and increased the number of people living in areas attaining the PM standard by 76 thousand, resulting in a total of 1.276 million people living in a total of nine areas designated to attainment.				
Data Source:	Same as FY 2000 APG 1.				
Data Quality:	Same as FY 2000 APG 1.				

EV 0000	DOOD ANNITAL DEDECOMANCE COALS AND MEASURES		FY 2000		
FY 2000	ANNUAL PERFORMANCE GOALS AND MEASURES	Planned	Actual	Actual	
FY 2000 APG 3:	Provide new information on the atmospheric concentrations, human exposure, and health effects of particulate matter (PM), including PM 2.5, and incorporate it and other peer-reviewed research findings in the Second External Review Draft of the PM AQCD for NAAQS Review.				
(FY 1999)	Identify and evaluate at least two plausible biological mechanisms by which particulate matter (PM) causes death and disease in humans.			2	
Performance Mea	asures				
- Hold CASAC F	Reviewof draft PM Air Quality Criteria Document (AQCD).	9/30/00	9/30/00		
- Longitudinal Pa	anel Study on exposure of susceptible sub-populations to PM.	1	1		
- PM Monitoring	Study Data.	9/30/00	9/30/00		
- Baltimore Stud	ly on Response of Elderly to PM.	1	1		
Explanation:	Goal met. A tremendous amount of new research on atmospheric concentrations, exposures, and health effects of PM was published in FY 2000. This research and the results of the FY 2000 Clean Air Scientific Advisory Committee (CASAC) review of the first draft of the PM AQCD are being incorporated into the second External Review Draft of the PM AQCD for National Ambient Air Quality Standards (NAAQS) review. FY 2000 research products included publication of data generated from PM monitoring studies that reduce uncertainties on atmospheric PM concentrations and publication of a first generation exposure model for PM of ambient origin. Research also examined ways to estimate the susceptibility of sensitive subgroups, specifically through a longitudinal study on exposure to PM and a study on the response of the elderly to PM.				
Data Source:	Agency generated material.				
Data Quality:	As required by the Agency-wide formal peer review policy issued in 1993, and reaffirmed in 1994 and 1998, all major scientific and technical work products used in Agency decision-making are independently peer reviewed before their use. EPA has implemented a rigorous process of peer review for both its in-house and extramural research programs. Peer review panels include scientists and engineers from academia, industry and other federal agencies.				
	DUCE AIR TOXIC EMISSIONS BY 75 PERCENT FROM 1993 LEVELS TO TO AMERICANS OF CANCER AND OTHER SERIOUS ADVERSE HEALT AIRBORNE TOXICS.				
FY 2000 APG 4:	Air toxic emissions nationwide from both stationary and mobile sources combined will be reduced by 3% from 1999 (for a cumulative reduction of 30% from the1993 levels of 4.3 million tons.) Corresponds with FY 2000 NEPPS CPM.	3%	Data available in FY 2004		
(FY 1999)	Reduce air toxic emissions by 12% in FY 1999, resulting in cumulative reduction of 25% from 1993 levels.			Data available	
Explanation:	FY 2000: FY 2000 data will not be available until 2004 due to time lags associated with reporting and analysis. FY 2000 Target: 3%. Estimated Actual: 9%, from a revised baseline of 5.9 million tons. The Agency expects to exceed the FY 2000 annual performance goal primarily due to compliance with the large municipal waste combustion rule. The estimated 9% reduction in FY 2000 would result in a cumulative reduction of 32% from 1993 revers.			mid- 2001	
	These estimated reductions are calculated on the expected reduction from rules becoming effective on emission sources in FY 2000. Actual emission inventory information from the FY 2002 National Toxics Inventory (NTI) will be available in mid-2004.				

Data Source:	1996 NTI indicates that the baseline for 1993 is actually 5.9 million tons. Although emission reduction targets were exceeded, this translates into a smaller percentage reduction of the increased baseline (estimates for FY 1999 indicate a 14% reduction in air toxic emissions from the 4.3 million ton baseline). The estimated 10% reduction in FY 1999 would result in a cumulative reduction of 23% from 1993 levels. These estimated reductions are calculated on the expected reduction from rules becoming effective on emission sources in FY 1999. Actual emission inventory information from the FY 1999 NTI will be available in mid-2001.  The NTI is a database that houses information from other primary sources. For base year 1993 the system includes emissions information for 188 hazardous air pollutants from more than 900 stationary sources. The 1996 NTI contains facility-specific estimates from state and local data supplemented with data collected during the development of the Maximum Achievable Control Technology standards and Toxic Release Inventory data. It also includes emissions from large industrial or point source, smaller stationary area sources, and mobile sources.  Because NTI is primarily a database to house information from other primary sources, most of the quality assurance and control efforts focus on identifying duplicate data from the different data sources and supplementing missing data. There has been no effort to validate information collected from other databases, but a significant effort is underway to determine the best	Planned	Actual	Actu
Data Source:	Although emission reduction targets were exceeded, this translates into a smaller percentage reduction of the increased baseline (estimates for FY 1999 indicate a 14% reduction in air toxic emissions from the 4.3 million ton baseline). The estimated 10% reduction in FY 1999 would result in a cumulative reduction of 23% from 1993 levels. These estimated reductions are calculated on the expected reduction from rules becoming effective on emission sources in FY 1999. Actual emission inventory information from the FY 1999 NTI will be available in mid-2001.  The NTI is a database that houses information from other primary sources. For base year 1993 the system includes emissions information for 188 hazardous air pollutants from more than 900 stationary sources. The 1996 NTI contains facility-specific estimates from state and local data supplemented with data collected during the development of the Maximum Achievable Control Technology standards and Toxic Release Inventory data. It also includes emissions from large industrial or point source, smaller stationary area sources, and mobile sources.  Because NTI is primarily a database to house information from other primary sources, most of the quality assurance and control efforts focus on identifying duplicate data from the different data sources and supplementing missing data. There has been no effort to validate information collected from			
Data Quality:	For base year 1993 the system includes emissions information for 188 hazardous air pollutants from more than 900 stationary sources. The 1996 NTI contains facility-specific estimates from state and local data supplemented with data collected during the development of the Maximum Achievable Control Technology standards and Toxic Release Inventory data. It also includes emissions from large industrial or point source, smaller stationary area sources, and mobile sources.  Because NTI is primarily a database to house information from other primary sources, most of the quality assurance and control efforts focus on identifying duplicate data from the different data sources and supplementing missing data. There has been no effort to validate information collected from			
- ; ;	sources, most of the quality assurance and control efforts focus on identifying duplicate data from the different data sources and supplementing missing data. There has been no effort to validate information collected from			
1	primary source data in cases where a discrepancy among data sources is found. Mobile source data are validated by using speciated test data from the mobile source emission factor program, along with peer-reviewed models which estimate national tons for the relevant year. Because of the different data sources, not all information in the NTI has been compiled using identical methods. Also, for the same reason, there are likely some geographic areas with more detail and accuracy than others. Each base year's NTI has been reviewed by internal EPA staff, state and local agencies, and industry.			
 	Provide new information and methods to estimate human exposure and health effects from high priority urban air toxics, and complete health assessments for the highest priority hazardous air pollutants (including fuel/fuel additives).			
(FY 1999)	Complete health assessments for five air toxics as high priority.			4
Performance Measu	<u>ures</u>			
Integrated Risk Ir	& framework for incorporating Acute Reference Exposure values in normation System (IRIS).	9/30/00	9/30/00	
- Submit for Agenc	cy Review Three Toxicological Reviews and Assessments.	3	2	
	Goal met. Reports have been published that provide important methods and data on high priority hazardous air pollutants, including the most potent carcinogenic environmental polycyclic aeromatic hydrocarbon (PAH) yet discovered, dibenzo [a,l]pyrene. For non-cancer endpoints new risk assessment guidance for assessing health risks from acute exposures has been developed, and research results on relationships between exposure concentration and duration have been published. Evaluation of dose-response relationships for several chemicals have been completed, as have fuel/fuel additives reviews, activities that will support the residual risk, mobile sources, and National Air Toxics Assessments evaluations and rulemakings. EPA submitted two assessments for consensus review: vinyl chloride (IRIS review completed) and hexachlorocyclopentadiene (in IRIS consensus review) while the third assessment (quinoline and methyl chloride) was delayed and submitted for consensus review during the first quarter of FY 2001.			
Data Source:	Same as FY 2000 APG 3.			
Data Quality:	Same as FY 2000 APG 3.			

EV 2000	ANNUAL DEDECTMANCE COAL CAND MEACURES	FY 2	.000	FY 1999
FY 2000 A	ANNUAL PERFORMANCE GOALS AND MEASURES	Planned	Actual	Actual
BY 2005, IMP	ROVE AIR QUALITY FOR AMERICANS LIVING IN AREAS THAT DO NO CARBON MONOXIDE, SULFUR DIOXIDE, LEAD, AND NITROGEN		HE NAAQS	FOR
FY 2000 APG 6:	Maintain healthy air quality for 27.7 million people living in 46 areas attaining the CO, SO <sub>2</sub> , NO <sub>2</sub> , and Lead standards, and increase by 1.1 million the number of people living in areas with healthy air quality that have attained the standard. •• Corresponds with FY 2000 NEPPS CPM.	27.7 M 1.1 M	27.7 M 3.41 M	
(FY 1999)	Certify that 14 of the 58 estimated remaining nonattainment areas have achieved the National Ambient Air Quality Standards (NAAQS) for carbon monoxide, sulfur dioxide, or lead.			13
Explanation:	Goal met. Maintained healthy air quality for 27.7 million people living in 46 areas meeting the carbon monoxide (CO), sulfur dioxide ( $SO_2$ ), nitrogen dioxide ( $NO_2$ ) and Lead standards. Ten new areas came into attainment and increased the number of people living in areas attaining the standards by 3.4, million resulting in a total of 31.1 million people living in a total of 56 areas designated to attainment.			

BY 2010, AMBIENT SULFATES AND TOTAL SULFUR DEPOSITION WILL BE REDUCED BY 20-40% FROM 1980 LEVELS DUE TO REDUCED SULFUR DIOXIDE EMISSIONS FROM UTILITIES AND INDUSTRIAL SOURCES. BY 2000, AMBIENT NITRATES AND TOTAL NITROGEN DEPOSITION WILL BE REDUCED BY 5-10% FROM 1980 LEVELS DUE TO REDUCED EMISSIONS OF NITROGEN OXIDES FROM UTILITIES AND MOBILE SOURCES.

Data Source:

**Data Quality:** 

Same as FY 2000 APG 1. Same as FY 2000 APG 1.

FY 2000 APG 7:	5 million tons of ${\rm SO_2}$ emissions from utility sources will be reduced from the 1980 baseline.	5 million tons	Data available	
(FY 1999)	Maintain 4 million tons of sulfur dioxide ( $SO_2$ ) emissions reduction from utility sources.		in late 2001	5.04 millior
Explanation:	Although emissions data are not available until one year after the end of the calendar year, the Agency is on track to achieve the annual performance goal.			tons
Data Source:	Emissions Tracking System (ETS) receives hourly measurements of $SO_2$ and nitrogen oxide $(NO_2)$ volumetric flow, carbon dioxide $(CO_2)$ , and other emission-related parameters from more than 2,000 facilities affected by Title IV.			
	Continuous Emission Monitoring Systems (CEMS) collect data to measure $\mathrm{NO_x}$ and $\mathrm{SO_2}$ emissions at major electric utilities.			
	Clean Air Status Trends Network (CASTNet) is primarily an eastern, long-term dry deposition network funded and operated by EPA. The database, which is also maintained by EPA, measures sulfate and nitrate dry deposition and meteorological information at approximately 70 active monitoring sites.			
	National Atmospheric Deposition Program (NADP) is a database that provides measurements of sulfate and nitrate wet deposition at approximately 200 active monitoring sites. EPA, along with several other federal agencies, state, and other private organizations, provide funding and support for the system. The database is maintained by the Illinois state Water Survey/University of Illinois.			
Data Quality:	The Agency performs a series of quality assurance tests of CEMS performance. For these tests emissions data are collected under highly structured, carefully designed testing conditions, which involve either high quality standard reference materials or multiple instruments performing simultaneous emission measurements. The resulting data are screened and analyzed using a battery of statistical procedures, including one that tests for systematic bias. If the CEMS fails the bias test, then either the problem is corrected or adjusted to prevent the low bias. CASTNet and NADP have established data quality objectives and quality control procedures for accuracy, precision, and representativeness. These data are intended to establish trends in wet deposition and precipitation chemistry.			

	1999 ANNUAL PERFORMANCE GOALS WITHOUT CORRESPONDING FY 200 Performance Data Available in FY 2000 and Beyond or Performance Targets Beyond		
		Planned	Actual
FY 1999 APG:	Maintain 4 million tons of sulfur dioxide $(SO_2)$ emissions reduction from utility sources, and maintain 300,000 tons of nitrogen oxides $(NO_x)$ reduction from coal-fired utility sources.	4 million tons	5.04 million tons
Explanation:	Based on information received in FY 2000, EPA exceeded its FY 1999 target. The Agency surpassed its target of 4 million tons of $SO_2$ emissions reductions and actually reduced $SO_2$ emissions from utility sources by 5.04 million tons from the 1980 baseline. The Agency also reduced $NO_x$ from 265 coal-fired utility units by 420 thousand tons, exceeding the goal by 120 thousand tons.	300,000 tons	420,000 tons
Data Source:	Same as FY 2000 APG 7.		
Data Quality:	Same as FY 2000 APG 7.		



All Americans will have drinking water that is clean and safe to drink. Effective protection of America's rivers, lakes, wetlands, aquifers, and coastal and ocean waters will sustain fish, plants, and wildlife, as well as recreational, subsistence, and economic activities. Watersheds and their aquatic ecosystems will be restored and protected to improve human health, enhance water quality, reduce

flooding, and provide habitat for wildlife.

### **OVERVIEW**

Safe drinking water is the first line of defense in protecting human health. The American public enjoys one of the safest drinking water supplies in the world, but illnesses due to contaminants continue to occur. In FY 2000 there were no reported major disease outbreaks caused by microbial or chemical contaminants in drinking water, but during the past decade drinking water contamination caused illness and even death in places such as Milwaukee, Wisconsin; Alpine, Wyoming; and rural upstate New York. As drinking water infrastructure ages and new contaminants are identified, maintaining the nation's safe drinking water supply remains a critical challenge. EPA's human health protection concerns also extend to threats posed by swimming at contaminated beaches or eating contaminated fish.

Clean water and healthy aquatic ecosystems support all life, are vital to many sectors of the U.S. economy, and play an important role in Native American culture. Fish, shellfish, and many bird species depend on healthy aquatic ecosystems for food and shelter. Aquatic plants, which provide food and cover to many aquatic species, need clean water to thrive. U.S. manufacturers and the agricultural industry use vast quantities of clean water every year to produce products, irrigate crops, and raise animals. The nation's waters are the number one vacation choice for Americans. For example, in Long Island Sound, New York, beachgoers contribute more than \$800 million annually to the local economy. Many Native American tribes value clean water and some tribes invoke the spirit of water in cultural ceremonies for medicinal and purification purposes.

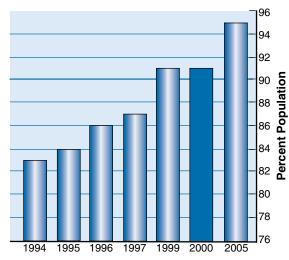
### FY 2000 PERFORMANCE

### **Protecting People From Contamination in Drinking** Water, Fish, and Recreational Waters

**Improving Drinking Water Quality** 

For the second consecutive year at least 91 percent of the American public served by community water systems received water meeting all health-based drinking water standards in effect since 1994, even as EPA, states and tribes worked collaboratively to develop new national standards and regulations. In addition the population served by non-transient, non-community (NTNC) drinking water systems with no violations in FY 2000 was 93 percent, just below the target of 96 percent. EPA missed the target because the Agency estimated FY 2000 performance based on the data reported by non-transient water systems several years

### Population Served by Community Water Systems Meeting Drinking Water Standards



ago. The actual information reported for FY 2000 includes data from many more of these systems, which are now subject to more rigorous reporting requirements. The FY 2000 data reflects a more complete and accurate picture of human health protection for persons who drink water supplied by these NTNC drinking water systems. The Agency has worked diligently with states and water systems over the past few years to implement its drinking water data reliability plan.

In FY 2000 EPA headquarters and regions, tribes and states took significant actions in four key areas: focusing regulations on high-risk contaminants, improving consumer right-to-know about drinking water quality, protecting source waters, and financing improvements to drinking water systems. To address microbial contaminants such as Cryptosporidium, E. coli, and Giardia, which are the most widespread threat to drinking water, in the spring of 2000 EPA proposed the Ground Water Rule and the Long-Term Enhanced Surface Water Treatment Rule. These two rules will protect consumers served by groundwater and small surface water systems by preventing up to 198,000 cases of waterborne disease per year. They build on the Interim Enhanced Surface Water Treatment Rule, promulgated in 1998, which required surface water systems serving over 10,000 persons to protect against microbial contamination. Together these rules will complete the first series of measures for microbial protection, and cover all consumers of water provided by public water systems, whether from surface water or groundwater, in small towns and large cities.

In addition EPA and a Federal Advisory Committee composed of states, water systems, medical professionals, and other public officials, reached agreement on the second phase of standards mandated by the 1996 Safe Drinking Water Act (SDWA) Amendments involving microbial contaminants, disinfectants used to treat such contaminants, and disinfection byproducts resulting from treatment. These standards will increase controls for source waters at high risk of contamination by *Cryptosporidium*, et.al. Also they are examples of the Agency's first endeavor to address acute health effects that may be caused by disinfection byproducts and thereby will assure equal protection from exposure to these byproducts throughout the drinking water distribution system.

Radon and arsenic were the high-risk chemical contaminants addressed by the drinking water program in FY 2000. In November 1999 the Agency proposed a multimedia mitigation approach for radon that will have a significant effect on reducing the human health risk from radon in drinking water as well as in indoor air. EPA also proposed new protective standards to address arsenic in drinking water in June 2000. Arsenic is a known carcinogen and is also linked to many noncancer health effects. EPA, states, tribes, and water systems agree that the current, 50-year old arsenic standard of 50 parts per billion (ppb) does not provide adequate human health protection. In March 1999 the National Academy of Sciences concluded that the current 50 ppb standard does not protect human health and recommended that it be revised downward as quickly as possible. Consequently the revised rule not only proposed a lower level but also requested comment from both the drinking water community and the general public on alternative regulatory levels that would be reviewed thoroughly and carefully during the final rulemaking process.

The human health protection afforded by these new standards can be realized only if there is effective implementation at the state, tribal and local levels. In this regard EPA conducted more than 20 training and technical assistance sessions with regional, state, and drinking water utility staff during FY 2000 on rules addressing microbial contaminants and disinfectants/ disinfection byproducts, lead and copper, consumer confidence, and unregulated contaminant monitoring, as well as on guidelines for operator certification. Ten workshops on small systems' concerns were also held nationwide. States, associations, and environmental groups have undertaken an unprecedented effort at training and technical assistance for water systems, particularly small systems, local governments, and the general public. In addition EPA has worked with partners to lead many nationwide endeavors to increase public drinking water protection and awareness. All states are overseeing capacity development and operator certification programs to ensure that owners and operators of public water systems are fully implementing existing and new SDWA requirements.

The Agency is approaching and promoting prevention of drinking water contamination through both voluntary and mandatory activities. Fifty states and territories have an EPA-approved Source Water Assessment and Prevention Program and conduct

# CONSUMERS GET BETTER AND FASTER INFORMATION ABOUT THEIR DRINKING WATER

As a result of the new Consumer Confidence Report Rule, for the first time ever approximately 253 million Americans have access to annual consumer confidence reports on the quality and safety of their drinking water. These reports give customers of drinking water systems the information they need to make their own health decisions. More than 100 million Americans are able to read their water quality reports on-line. Water systems, states, and EPA worked hard to assure compliance with this rule in its first year, providing reports for 99 percent of the population covered by the rule. In May 2000 the Agency also revised the Public Notification Rule to require public water systems to alert consumers within 24 hours if there is a serious problem with their drinking water that might pose a health risk.

assessments of their public water supplies. Data from these assessments will help determine the susceptibility to contamination of each state's sources of public drinking water and set the stage for community water systems to target their efforts to actual or potential highrisk contaminants. Forty-nine states are voluntarily going beyond the requirement of the SDWA, which is only to complete the assessments, by beginning to act to prevent source water contamination, based on information gathered during the assessments. These next steps are critical to the future of the drinking water program, and are the primary responsibilities of states, tribes, and water systems to implement. In December 1999 EPA issued new final regulations on two types of shallow disposal wells into which a variety of hazardous and nonhazardous fluids (e.g., chemicals, mining, oil, and gas) is injected below the land's surface. There are an estimated one million underground injection wells nationwide, of which about 700,000 are shallow disposal wells. The new regulations, targeted to motor vehicle disposal and cesspools, are a vital tool in ensuring that fluid wastes are contained in these disposal wells safely, and do not pose a health risk to the majority of U.S. public water systems that get their drinking water from groundwater.

Over the past four years of the Drinking Water State Revolving Fund (DWSRF), EPA has made available approximately \$3.6 billion in assistance to all

50 states, Puerto Rico, the District of Columbia, and the territories to establish their revolving loan programs, and states have moved quickly to make these funds available to water systems. Since 1997 more than 1,400 loans totaling over \$2.8 billion support projects to modernize or replace outdated plants and pipes as well as to construct new systems. Small water systems have been a focus of these loans, with over three-fourths awarded to systems serving fewer than 10,000 people. These loans enable water systems to address critical human health needs, even as the cost of providing safe drinking water—finding a water supply, treating the water, delivering the water, and maintaining the system—continues to be a challenge. EPA's 1997 Drinking Water Needs Survey Report to Congress identified more than \$138 billion in industry needs, the vast majority of which are targeted for delivery of water, rather than for meeting SDWA requirements.

### Reducing Exposure to Contaminated Fish

States and tribes have primary responsibility for informing the public about the risks of eating contaminated fish, and EPA plays a leadership and support role. In 1999 approximately seven percent of river miles and 16 percent of lake acres were assessed to determine if they contain fish or shellfish that should not be eaten or should be eaten only in limited quantities, particularly by sensitive populations such as pregnant women and young children. The target of ten percent of river miles assessed was not met. This was primarily because states focused their resources on lakes, where most recreational fishing occurs. The total number of fish advisories in the United States rose by 145 or six percent (see page II-41 in Goal 4). Advisories increased for mercury, polychlorinated biphenyls (PCBs), dioxin, and dichlorodiphenytrichloroethane (DDT), but decreased for chlordane again in FY 2000. The increase in advisories generally reflects more assessments being performed and improved monitoring and data collection methods. Currently, 40 states follow EPA's guidance for developing fish consumption advisories based on risk assessments, up from 25 states in 1998.

To support the fish advisory program, EPA in FY 2000 updated its technical guidance documents to include new toxicity information for several persistent bioaccumulative toxics, new fish consumption limits for recreational and subsistence fishers, and recommendations for simplified advisory approaches. Pursuant to the Clean Water Action Plan (CWAP), EPA

and the American Fisheries Society published a joint report on the national consistency of fish consumption advisory programs.

### **Improving Beach Monitoring and Public Notification**

In FY 2000 EPA and state officials worked to strengthen the voluntary beach protection program to help states and local communities protect their residents from exposure to contaminated waters at their beaches.

### NEW JERSEY LEADS THE WAY IN BEACH WATCH

The State of New Jersey is working with 94 of its coastal municipalities to eliminate beach pollution. The municipalities are mapping their storm water and sewage lines and monitoring storm water discharges to coastal waters. Beach closings are usually associated with specific storm events or sewage collection system disruptions. Over the past several years, contamination incidents and subsequent beach closings have been more localized and short-lived. The State expects that continuing to improve storm water management will further decrease the need for beach closings.

EPA's internet site posted information provided by state and local officials on 1,981 beaches—35 percent more beaches than last year, and approximately 50 percent more beaches than when the program began in 1997. This information included 150 digitized maps available to the public, meeting EPA's goal for FY 2000. Approximately 459 beaches (24 percent of the reported beaches) had at least one advisory or closing during the

year. Although the number of beaches reported has increased significantly during the past three years, the percentage of beaches with a closing or advisory has remained consistent at approximately 25 percent. Leading causes of impairment included rain leading to storm water runoff which caused elevated bacterial levels.

EPA also provided technical assistance materials to help state and local officials improve their monitoring and advisory programs. EPA published proceedings of two major conferences which addressed needs and procedures designed to improve beach monitoring and public notification across the country. The Agency also produced and distributed a training video and manual on using EPA recommended recreational water quality indicators (enterococci and *E. coli*) to assess beach water quality. EPA will continue to work with state and local officials, and health professionals to improve the quality and consistency of monitoring and reporting beach water conditions and to improve and increase communications with the public.

### **Conserving and Enhancing the Nation's Waters**

In the latest national inventory of water quality summarized below, states, tribes, territories, and interstate commissions report that about 40 percent of the U.S. streams, lakes, and estuaries assessed (about 32 percent of all U.S. waters) were not clean enough to support uses like fishing and swimming. The leading pollutants in impaired waters are sediment, bacteria, nutrients, and metals. Runoff from agricultural lands and urban areas is the primary source of these pollutants.

SUMMARY I	PROFILE: 199	8 NATIONAL WATER	R QUALITY INVENT	TORY REPORT TO	CONGRESS
Waterbody Type	Total Size	Amount Assessed (% of Total)	Good* (% of Assessed)	Good but Threatened* (% of Assessed)	Polluted* (% of Assessed)
River (miles)	3,662,225	842,426 (23%)	463,441 (55%)	85,544 (10%)	291,264 (35%)
Lakes (acres)	41,593,748	17,390,370 (42%)	7,927,486 (46%)	1,565,175 (9%)	7,897,110 (45%)
Estuaries (sq. miles)	90,465	28,687 (32%)	13,439 (47%)	2,766 (10%)	12,482 (44%)

<sup>\*</sup> Includes waterbodies assessed as not attainable for one or more uses. Note: percentages may not add up to 100% due to rounding.

The CWAP calls for states to identify, from among the 2,262 watersheds nationwide, those high priority watersheds for which restoration plans will be developed and actions taken to restore water quality. For FY 2000 EPA established an ambitious goal of having improvement projects underway in 350, or about 40 percent, of the 889 high-priority watersheds identified by states through last year's unified watershed assessments. Funded largely through increased grants to states for implementation of nonpoint source controls, projects are underway in 324 high priority watersheds. This is slightly short of EPA's goal, but indicates a significant promise of real water quality improvements in impaired watersheds.

State and tribal water quality standards represent water quality goals for each water body and establish the regulatory groundwork for the water quality-based controls (such as the National Pollutant Discharge Elimination System (NPDES) permits) necessary to protect human and ecological health. In FY 2000 the Agency issued guidance to assist states and tribes in assessing the biological health of their waters and recommended new criteria that could be incorporated into existing standards to control nutrients and diseasecausing microorganisms. During FY 2000 EPA completed new methods for sediment toxicity testing and compiled information on the food chain effects of contaminated sediments. EPA also issued a revised methodology for deriving ambient water quality criteria to protect human health. The methodology provides guidance to states and tribes to develop criteria and describes the Agency's process for developing national criteria. In FY 2000 EPA acted on new water quality standard submissions for 35 states and 16 tribes. This total did not meet the FY 2000 goal of 22 tribes because tribes have not yet been approved as expected for "treatment as a state" which is a pre-condition of being approved to run a tribal water quality standards program. In addition some extended consultations delayed the submission of tribal water quality standards.

During FY 2000 states and EPA made significant progress toward commitments on core performance measures for determining the sources of pollution and designing clean-up plans, known as Total Maximum Daily Loads (TMDLs). This program is the framework for working in partnership cooperatively with the states to clean up America's polluted waterways under the Clean Water Act (CWA). Under existing authorities of

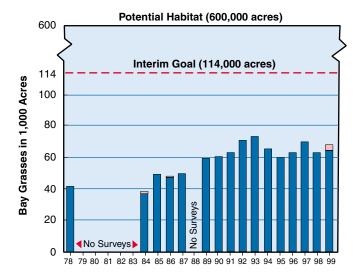
the 2,674 water segments previously identified by states as being polluted and needing TMDLs in FY 2000, states submitted TMDLs for 2,167. EPA approved 1,276 TMDLs submitted by states, and EPA established 166 TMDLs. The number of TMDLs submitted is greater than the number of TMDLs approved, primarily due to the large number of TMDLs submitted for non-impaired waters under CWA Section 303(d)(3), which does not require either approval or disapproval by EPA. In July 2000 EPA issued a final rule addressing the national TMDL program.

EPA continued work to support focused coastal watershed protection activities through efforts in the 28 estuaries in the National Estuary Program. In addition the Agency completed two ocean dumping site designation actions, including a proposed rule to designate an ocean disposal site off Coos Bay, Oregon, and the final designation of the Atchafalaya River, Bayous Chene, Boeuf, and Black disposal sites off the Louisiana coast.

Understanding the scope and quality of our nation's wetlands continues to be a top program priority for EPA. Wetlands play a pivotal role in ensuring watershed health by filtering contaminants, controlling flooding, and serving as a critical habitat for many species of plantsand animals. In FY 2000 EPA met its goal of four more states that made significant progress toward establishing a wetlands monitoring program. EPA also continued working with the U.S. Army Corps of Engineers to make the wetlands permitting program more environmentally protective, including funding the National Academy of Sciences to study the effectiveness of compensatory mitigation in the wetlands permitting program.

The Chesapeake Bay Program Partners have been working to restore water quality and key habitats for the Bay's living resources. Underwater grass beds are a vital habitat for fish, crabs, and other bay creatures. The grasses also serve as a nursery habitat for many fish species. The table displays the trend in Bay grass acreage. From 1985 to 2000, the Chesapeake Bay Program Partners restored over 31,000 acres of Bay grass beds, contributing significantly to the current total level of 68, 125 acres of submerged aquatic vegetation. Although the Agency's FY 2000 target of 71,500 was not achieved, increases are expected to continue as overall water quality improves.

### Chesapeake Bay Grass Restoration



The effects of population increases and settlement shifts to coastal areas represent a particular challenge in the Gulf of Mexico region. In FY 2000 EPA's Gulf of Mexico Program, through the leadership of the five gulf states, teamed with numerous coastal communities, environmental organizations, and business and industry leaders to assist in the restoration of 31 impaired coastal water bodies.

In addition, in FY 2000 the Gulf Program's innovative public and private partnerships resulted in a threefold increase in assistance to the states and coastal communities for projects to restore their coastal watersheds. New projects included protection and restoration of more than 800 acres of important seagrass and coastal wetland habitats, and significant results have been achieved through Gulf Five Star Restoration Partnership projects.

### **Reducing Pollutant Loadings**

### **Reducing Point Source Pollution**

A key element of the Agency's efforts to achieve its overarching goal of clean and safe water is the reduction of pollutant discharges from point sources and nonpoint sources. Under the NPDES program, specific limits are set for pollutants discharged from point sources into waters of the United States. These limits are designed to ensure that national technology-based standards (effluent limitations and guidelines) and water quality-based requirements are adequate to meet water quality standards throughout the country. In

support of this effort, a number of activities took place in FY 2000, including the following:

- Rulemakings to address wet weather pollution include: (1) promulgation of a final regulation addressing storm water discharges (the Storm Water Phase II Final Rule) which are a leading cause of impairment for the nation's rivers, lakes, and estuaries; and (2) development of draft proposed rules for sanitary sewer overflows, after an extensive stakeholder process.
- Implementation of an aggressive strategy to reduce the backlog of NPDES permits in regions and states (see below). Nationwide, at the end of FY 2000 approximately 70 percent of NPDES permits were current. This represents a 16 percent increase over the 54 percent that were current as of November 1998. Eleven states are already below the ten percent backlog target, and a total of 18 states are on track to meet the target by December 31, 2001. At the end of FY 2000, 44.3 percent (285) of the 644 total EPA issued permits for major point sources were expired; 78.2 percent (1,603) of the 2,140 EPA issued permits for minor point sources were expired. Of 6,115 state-issued permits for major point sources, 26.2 percent (1,603) were expired, and of 49,672 state-issued permits for minor point sources, 15,563 or 31.3 percent were expired. The Agency will continue to work with regions and states to ensure that they take more aggressive steps to meet the 2005 corrective action date.
- Continued work on new guidance and standards for Concentrated Animal Feeding Operations (CAFOs) to mitigate actual and potential water quality impacts from thousands of CAFOs. The largest may have as many as a million animals at one facility. Manure from stockpiles, lagoons, or excessive land application can reach waterways through runoff, erosion, spills, or via ground water. These discharges can result in excessive nutrients (nitrogen, phosphorus, and potassium), oxygendepleting substances, and other pollutants in the water. This pollution can kill fish and shellfish, cause excess algae growth, harm marine mammals, and contaminate drinking water.

Providing vital financial support for each of these activities is the Clean Water State Revolving Fund

program (CWSRF). For FY 2000 the CWSRF made nearly \$4.1 billion available for nationwide construction of wastewater treatment facilities. The repayments of these project loans keeps the funds "revolving" and continually working for American taxpayers. For FY 2000 the CWSRF program continued to encourage use of state Integrated Priority Planning Systems to target new projects at each state's most pressing pollution control needs. Since CWSRF financing began in 1988, more than \$30 billion in pollution control financing has been provided to help achieve water quality standards.

In FY 2000 EPA promulgated four new effluent limitation guidelines for the landfill, commercial hazardous waste combustor, transportation equipment cleaning, and centralized waste treatment industries, which should result in combined pollution reduction benefits of more than 65 million pounds of pollutants per year. The Agency also proposed a rule to prevent large fish kills at cooling water intakes at new facilities and issued the 2000 Effluent Guidelines Plan, which outlined a new strategy for future regulation. EPA published a final test procedure for cyanide that will help NPDES permit writers set limits and help regulated facilities demonstrate compliance with those limits.

### Strengthening State Nonpoint Source Programs

For the last several years, EPA has been working with states to upgrade and strengthen their nonpoint source control programs. In FY 2000 EPA completed draft guidelines for management of on-site wastewater treatment ("septic") systems and began a major outreach effort to help states support these guidelines. By the end of FY 2000, 49 states had upgraded statewide nonpoint source management programs approved by EPA, exceeding the goal of 45 states. The states' upgraded 319 nonpoint source grant programs have each established specific goals and objectives that are related in large part to long-term goals to restore the quality of impaired waters over a given time period (usually about 15 years). They emphasize partnerships, operating in both watershed and statewide contexts, as appropriate, to accomplish their program goals. States focused one-half of their nonpoint source grants (\$100 million) for implementation of watershed restoration strategies that are designed to address their most critical water quality problems. In FY 2000 EPA encouraged states to use the CWSRF for nonpoint source pollution

control, including watershed restoration projects. As of June 30, 2000, 28 states had provided a total of \$1.2 billion for some 2,100 nonpoint source pollution control projects since the beginning of the program.

### **SUMMARY OF FY 2000 PERFORMANCE**

During FY 2000, EPA, states, and tribes made significant strides in addressing core challenges in the water program. Public participation increased in many parts of the water program. These engaged citizens are vital to achieving our shared watershed goals. EPA will continue to support states and tribes as they encourage more community engagement in decisions about environmental resources and other actions which affect human health and the environment. EPA will continue to develop and improve the program tools such as standards, permits, public information, and resources which help communities to achieve their goals.

# STRENGTHENING PROGRAM INTEGRITY THROUGH IMPROVED MANAGEMENT

EPA is continuing to implement an aggressive strategy to reduce the backlog of NPDES permits. The success of this strategy is critical to the Agency's ability to maintain the integrity of the NPDES program and, ultimately, to make progress toward achieving the overall loadings reduction goal. As of October 2000 about 70 percent of NPDES permits are current. This represents an improvement of 16 percent from the backlog measured in November 1998 (54 percent). Over the past year, the Agency has taken steps to ensure that regions and states take more aggressive steps to meet the 2005 corrective action date.

The Agency completed a comprehensive evaluation of the water quality standards program and took several actions to help eliminate the backlog in EPA approvals/disapprovals of state water quality standards submissions. As of October 2000 EPA was overdue in approving or disapproving 45 new or revised standards from 21 states and six tribes, and had yet to promulgate 19 sets of federal replacement standards for 15 states that have not corrected the portions of their standards previously disapproved. Backlogs in EPA water quality standards actions delay timely decisions to control environmental problems, increase uncertainty, and reduce credibility. EPA placed the highest priority on resolving the outstanding disapprovals and unreviewed

standards and made considerable progress in FY 2000. The Agency is also working to identify and eliminate the problems that generated the backlogs and other problems. These efforts include conducting an evaluation of the water quality standards program; working with states to develop a joint strategy to improve the water quality standards development, review, and approval process; and continuing work toward finalizing a Memorandum of Agreement on coordinating implementation of the CWA and the Endangered Species Act.

EPA is in the process of implementing a multistep action plan to enhance and improve the completeness, accuracy, and timeliness of data in the Agency's Safe Drinking Water Information System (SDWIS). Human health protection is at risk when the Agency does not have reliable and comprehensive data to ensure that safe drinking water is being provided by all public drinking water systems. During FY 2000 the Agency developed and implemented state-specific training for data entry into SDWIS, conducted data verification audits in 12 states, and developed a new transaction processing and tracking report. In addition, the Agency initiated efforts to develop a long-term Information Strategy Plan that addresses drinking water data collection and data management issues over the next 5 to 10 years.

Please see Section III - Management Accomplishments and Challenges for a further discussion of the above issues.

### RESEARCH CONTRIBUTIONS

Goal 2-related research conducted in FY 2000 continued to strengthen the scientific basis for drinking water standards by providing improved methods and new data to better evaluate and control the risks associated with exposure to chemical and microbial contaminants in drinking water. To support the SDWA and its 1996 amendments, EPA's drinking water research program focused on the development of health effects data, analytical tools, and risk assessment methods for disinfectant by-products (DBPs), waterborne pathogens, and arsenic. The Agency also continued to develop and evaluate cost-effective treatment technologies for removing pathogens from water supplies while minimizing DBP formation, and for maintaining the quality of treated water in the distribution system. Increased emphasis was placed on

filling key data gaps and developing methods for chemicals and microbial pathogens on the Contaminant Candidate List.

Research in FY 2000 evaluated exposures to stressors and their effects on aquatic systems and will improve the Agency's understanding of the structure, function, and characteristics of those systems. This research will be used to improve risk assessment methods to develop aquatic life, habitat, and wildlife criteria. The Agency is also developing assessment methods and cost-effective management technologies for contaminated sediments, with an emphasis on identifying innovative in situ solutions. In FY 2000 EPA continued to develop diagnostic tools to evaluate the exposures to toxic constituents of wet weather flows. The Agency also continued to develop and validate effective watershed management strategies for controlling wet weather flows, especially high-volume, toxic flows. Research was also conducted to develop the effective beach evaluation tools necessary to make timely and informed decisions on beach advisories and closures.

### **PROGRAM EVALUATION**

The General Accounting Office conducted a study on the states' ability to implement increasing drinking water program requirements. The final report of the study was released at a congressional hearing held on September 19, 2000, by the Subcommittee on Health and the Environment of the House Committee on Commerce (www.gao.gov, Report T-RCED-00-298). Prior to the release of GAO's report, EPA and the Association of State Drinking Water Administrators (ASDWA) agreed on actions to take in FY 2001 to address this issue. EPA will work with ASDWA and states to determine each state's program status, particularly to identify barriers and common problems. EPA's regions will then work with individual states to address barriers that are hindering each state's ability to fully meet SDWA goals. EPA headquarters is working with regions to share lessons learned about how to simplify and improve implementation of drinking water regulations. EPA plans to continue its effort to reduce monitoring and data collection burdens while still collecting adequate high quality data to meet essential program needs.

In addition to external studies, in FY 2000 EPA conducted several internal reviews which expanded its ability to use evaluation to strengthen program management to achieve the goals of clean and safe water. EPA assessed the process of developing, reviewing and approving state water quality standards. These state-adopted standards describe how water bodies will be used and contain the water quality criteria that must be met to protect those designated uses. Developing standards is primarily a state function. EPA's role is to review, in appropriate consultation with the U.S. Fish and Wildlife Service and the National Marine Fisheries Service (the Services), and affirm that the state standards meet the requirements of the CWA. The standards review and approval process has been criticized for being too slow and inefficient. EPA conducted a thorough nationwide evaluation of the program to identify the causes and recommend solutions that will improve EPA's approval process and assure that standards are based on sound science and that states have determined appropriate designated uses and criteria for monitoring. The evaluation found that statutory and programmatic differences, lack of sufficient resources and technical expertise, inefficient coordination and communication, and lack of clear and consistent national guidance all contributed to the problem. EPA is implementing several of the recommendations. In early FY 2001 the Agency will enter into a Memorandum of Agreement with the Services to streamline the now complex and timeconsuming review procedures related to the Endangered Species Act. The Agency also expects to complete a strategy for implementing other study recommendations during the latter part of FY 2001.

EPA completed an internal evaluation of the National Marine Debris Monitoring Program, to determine whether this voluntary program is statistically effective and whether the program design remains valid. Preliminary results suggest that the program will meet its original goals of measuring the amount of marine debris on U.S. coasts and identifying the sources of the debris. EPA is partnering with the Center for Marine Conservation (CMC) on this project. Summarized data sets are available on CMC's web site at <a href="http://www.cmc-ocean.org/nmdmp">http://www.cmc-ocean.org/nmdmp</a> and are user friendly for local, state, regional, and nationwide stakeholders.

EPA conducted an internal evaluation of regional oversight of state NPDES programs in Regions 3 and

4. These internal reports recommended that the regions build consistency in resolving issues by using tools such as central tenets listing conditions for permit disapproval, time lines for comment and response, staff training and support, and tracking/management systems.

### ASSESSMENT OF IMPACTS OF FY 2000 PERFORMANCE ON FY 2001 ANNUAL PERFORMANCE PLAN

FY 2001 performance goals and measures will continue to evolve, reflecting EPA's increasing ability to measure and/or represent water quality and its contributions to human health and healthy aquatic ecosystems, as well as its value as a natural resource. For example, in FY 2001 EPA will report for the first time on the increased number of whole watersheds whose assessed waters largely meet designated uses. FY 2001 measures will display the continuing progress being made in maintaining the population served by water systems receiving safe drinking water (even as systems incorporate new health-based standards). The Agency has met its FY 2000 performance goal of another two million people receiving the benefits of secondary treatment (see Annual Performance Goal (APG) #16), so that nearly all of the population served by publicly owned treatment works receive the benefits of secondary treatment or better. Beginning in 2001, EPA will report the number of CWSRF projects funded as a performance measure. In addition EPA expects in 2001 to increase the number of waters for which TMDLs have been developed and to increase the number of updated water quality standards.

EPA's 2001 goals also reflect the fact that a complete baseline of information for many programs is not yet available, and that a number of our most important programs depend on significant voluntary efforts on the parts of states and other partners. Targets for 2001 include increasing the percentage of waters assessed for meeting water quality standards for designated uses, waters assessed for the need for fish advisories, and beaches where monitoring and notification of the public takes place. Resource constraints as well as overlapping or conflicting program requirements mean that meaningful monitoring and reporting remain challenges. States and tribes increased their efforts in these areas in FY 2000, and EPA expects them to continue to

improve in 2001. EPA will continue to work with partners to support better standards and testing, monitoring and reporting, and provision of the resulting information to the public quickly, clearly, and accurately.

### TABLES OF RESULTS

The following tables of results includes performance results for the FY 2000 APGs that appear in Goal 2. In cases where the FY 2000 APG is associated with an FY 1999 APG, the table includes the FY 1999 APG below the FY 2000 APG for ease in comparing performance. Where applicable, the tables note cases where FY 2000 APGs are supported by National Environmental Performance Partnership System Core Performance Measures (CPMs). As described in more detail in Section I of the report (the Overview and Analysis), states use CPMs to evaluate their progress toward mutual program goals. Additionally, EPA is providing information on FY 1999 APGs for which data was not available when the FY 1999 report was published as well as those FY 1999 APGs that are not associated with any APGs in FY 2000.

### FY 2000 Annual Report Annual Performance Goals and Measures - Table of Results

### **GOAL 2 - CLEAN AND SAFE WATER**

	FY 2000 ANNUAL PERFORMANCE GOALS AND MEASURES	FY 2	2000	FY 1999
Planned Actual Ac	1 1 2000 ANNOAL PENI CHIMANCE GOALS AND MEASURES	Planned	Actual	Actual

BY 2005, PROTECT HUMAN HEALTH SO THAT 95% OF THE POPULATION SERVED BY COMMUNITY WATER SYSTEMS WILL RECEIVE WATER THAT MEETS DRINKING WATER STANDARDS, CONSUMPTION OF CONTAMINATED FISH AND SHELLFISH WILL BE REDUCED, AND EXPOSURE TO MICROBIAL AND OTHER FORMS OF CONTAMINATION IN WATERS USED FOR RECREATION WILL BE REDUCED.

(FY 1999) 89% (Increase of 1% over 1998) of the population served by community water systems will receive drinking water meeting all health-based standards in effect as of 1994, up from 83% in 1994.  Explanation: Goal met.  Data Source: The Safe Drinking Water Information System (SDWIS) serves as the central repository for data on both the states' implementation of and compliance with existing and new drinking water regulations. States and EPA regions (for "direct implementation" jurisdictions) enter data representing public water systems characteristics and drinking water monitoring into the SDWIS database.  Data Quality: SDWIS has a full suite of software-based edit checks and quality assurance procedures to aid accurate data entry. However, there are recurrent reports of discrepancies between national and state data bases, as well as specific mis-identifications reported by individual utilities. Given the particular need for confidence in the completeness and accuracy of data about drinking water quality, EPA designated SDWIS content as an Agency material weakness in 1999, under the Federal Managers' Financial Integrity Act.  FY 2000 APG 10: Reduce exposure to contaminated recreational waters by increasing the information available to the public and decision-makers.  Performance Measures  - Cumulative number of beaches for which monitoring and closure data is available at "beaches" web-page.  1,800  1,981  150  150  Explanation: Goal met. The additional electronic information enables the public to precisely locate beach closings, reducing exposure to contaminated recreational waters.  Data Source: The National Health Protection Survey of Beaches Information Management System database.  Data Quality: Self-reported data for public use; participation is voluntary and presently incomplete. Therefore no rigorous quality assurance requirements are in place. Inconsistencies between different reporting jurisdictions are possible.	91% of the population served by community drinking water systems will receive drinking water meeting all health-based standards that were in effect as of 1994, up from 83% in 1994. Corresponds with FY 2000 NEPPS Core Performance Measure.	91%	91%	
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EV 0000 *	NAME OF THE PROPERTY OF THE PARTY OF THE PAR	FY 2	2000	FY 1999
FY 2000 A	NNUAL PERFORMANCE GOALS AND MEASURES	Planned	Actual	Actual
FY 2000 APG 11:	Reduce uncertainties and improve methods associated with the evaluation and control of risks posed by exposure to disinfection by-products (DBPs) in drinking water.			
(FY 1999)	EPA will develop critical dose-response data for disinfection by-products (DBPs), water-borne pathogens, and arsenic for addressing key uncertainties in the risk assessment of municipal water supplies.			9/30/99
Performance Meas	sures			
- Report regardin	g feasibility of refined DBP exposure data for previous epidemiological studies.	1	1	
- Report on new	DBPs from alternative disinfectants.	1	1	
- Final peer-revie	wed report on selected DBP mixtures' toxicological endpoints.	1	1	
Explanation:	Goal met. EPA completed methods for improving the interpretation of data from published DBP epidemiology studies, and reports that provide important information about new DBPs in drinking water, and the risks that may be posed by exposures to mixtures of these contaminants.			
Data Source:	Agency generated material.			
Data Quality:	As required by the Agency-wide formal peer review policy issued in 1993, and reaffirmed in 1994 and 1998, all major scientific and technical work products used in Agency decision making are independently peer reviewed before their use. EPA has implemented a rigorous process of peer review for both its in-house and extramural research programs. Peer review panels include scientists and engineers from academia, industry, and other federal agencies.			
FY 2000 APG 12:	Reduce uncertainties and improve methods associated with the evaluation and control of risks posed by exposure to microbial contaminants in drinking water.			
(FY 1999)	EPA will develop critical dose-response data for disinfection by-products (DBPs), water-borne pathogens, and arsenic for addressing key uncertainties in the risk assessment of municipal water supplies.			9/30/99
Performance Meas	sures			
- Describe differe	ent technologies of cost/effective control of Cryptosporidium and DBPs.	9/30/00		
- Report on U.S.	waterborne disease outbreaks.	1	1	
- Evaluation of M	ethod 1622 for Cryptosporidium.	1	1	
Explanation:	Goal met. EPA completed reports on the nature and magnitude of waterborne disease outbreaks in the United States during 1997-1998 and on an evaluation of a key method for the identification of Cryptosporidium in drinking water, directly helping to reduce uncertainties and improve methods associated with the evaluation and control of risks posed by exposure to microbial contaminants in drinking water. A project to evaluate cost-effective treatment methods for Cryptosporidium and DBPs was not completed due to insufficient time being allotted for the completion of this research. However, EPA completed complementary projects, such as a research progress report on biofilm (microbial communities growing on the confining surfaces of a distribution system) formation and control which will provide useful information on protecting distribution systems. In this way EPA appreciably met the performance goal.			
Data Source:	Same as FY 2000 APG 11.			
Data Quality:	Same as FY 2000 APG 11.			

### FY 2000 ANNUAL PERFORMANCE GOALS AND MEASURES

FY 2000 FY 1999
Planned Actual Actual

CONSERVE AND ENHANCE THE ECOLOGICAL HEALTH OF THE NATION'S (STATE, INTERSTATE, AND TRIBAL) WATERS AND AQUATIC ECOSYSTEMS-RIVERS AND STREAMS, LAKES, WETLANDS, ESTUARIES, COASTAL AREAS, OCEANS, AND GROUNDWATER-SO THAT 75% OF WATERS WILL SUPPORT HEALTHY AQUATIC COMMUNITIES BY 2005.

	AQUATIC COMMUNITIES BY 2005.			_
FY 2000 APG 13:	Environmental improvement projects will be underway in 350 high priority watersheds as a result of implementing activities under Clean Water Action Plan (CWAP).	350	324	
(FY 1999)	As part of the CWAP, all states will be conducting or have completed unified watershed assessments, with support from EPA, to identify aquatic resources in greatest need of restoration or prevention activities.			56
Explanation:	Goal not met. Environmental improvement projects underway in 324 high priority watersheds, which is slightly short of EPA's ambitious goal. The goal is for FY 2000 only, to be superseded in FY 2001 by a direct measure of the number of large-scale watersheds showing improvements in water quality.			
Data Source:	Internal Agency count.			
Data Quality:	There are no data quality issues.			
FY 2000 APG 14:	Assure that states and tribes have effective, up-to-date water quality standards programs adopted in accordance with the Water Quality Standards regulation and the Water Quality Standards (WQSs) program priorities.			No FY 1999 APG
Performance Mea	sures			
<ul> <li>Number of state promulgated re</li> </ul>	es with new or revised WQSs that EPA either approved, or disapproved ,and placements.	15	35	
- Cumulative nun	nber of tribes with approved WQSs in place.	22	16	
Explanation:	Goal not met. State WQS reviews are under a 3-year cycle, as mandated by the Clean Water Act, under which all states maintain updated water quality programs; therefore, the Agency will review approximately one-third of all state/tribal programs each year. Fewer tribes than expected have achieved "treatment as a state" status, which is a pre-condition for being approved to run a WQS program. EPA is committed to improving the Agency's review and approval process for "treatment as a state" to address this barrier. In FY 2001 EPA expects to implement a Memorandum of Agreement with the U.S. Fish and Wildlife Service and the National Marine Fisheries Service to greatly improve the timeliness and effectiveness of cross-agency coordination in the WQS review and approval process. EPA will also provide additional technical assistance to tribes to help them develop better WQSs.			
Data Source:	Same as FY 2000 APG 13.			
Data Quality:	Same as FY 2000 APG 13.			
FY 2000 APG 15:	Identify the primary life support functions of surface waters that contribute to the management of sustainability of watersheds.			
(FY 1999)	EPA will provide data and information for use by states and Regions in assessing and managing aquatic stressors in the watershed, to reduce toxic loadings and improve ecological risk assessment.			9/30/99
Performance Mea	<u>sure</u>			
<ul> <li>Research strate structure and fu</li> </ul>	egy document to determine the impact of landscape changes on wetland unction.	1	1	
Explanation:	Goal met. The completed work evaluated specific habitats such as wetlands, riparian areas, headwaters, and estuaries to determine their basic function and role in the landscape. This information will allow EPA to determine what makes these habitats critical and will provide a basis for prioritizing protection and restoration decisions.			

EV 2002	ANNUAL PERFORMANCE GOALS AND MEASURES	FY 2	000	FY 1999
F1 2000	ANNUAL PERFURIMANCE GUALS AND MEASURES	Planned	Actual	Actual
Data Source:	Same as FY 2000 APG 11.			
Data Quality:	Same as FY 2000 APG 11.			
· · · · · · · · · · · · · · · · · · ·	LUTANT DISCHARGES FROM KEY POINT SOURCES AND NONPOINT AT LEAST 20% FROM 1992 LEVELS. AIR DEPOSITION OF KEY POLL BODIES WILL BE REDUCED.			
FY 2000 APG 16	: Another two million people will receive the benefits of secondary treatment of wastewater, for a total of 181 million people.	2 M	2 M	
(FY 1999)	Another 3.4 million people will receive the benefits of secondary treatment of wastewater, for a total of 179 million.			3.4 M
Explanation:	Goal met. Currently nearly all of the nation's population is served by publicly owned treatment works with secondary treatment or better.			
Data Source:	Manual system. Extracted from EPA databases including the Clean Water Needs Survey Database and the Permits Compliance System.			
Data Quality:	Data are manually verified.			
FY 2000 APG 17	: Industrial discharges of pollutants to the nation's waters will be significantly reduced through implementation of effluent guidelines.			No FY 199
Performance Me				APG
	duction in toxic-pollutant loadings by facilities subject to effluent guidelines between 1992-1999, against 1992 levels (predicted by models).	4 M lbs	4 M lbs	
	duction in conventional-pollutant loadings by facilities subject to effluent mulgated between 1992-1999, against 1992 levels (predicted by models).	385 M lbs	473 M lbs	
	duction in non-conventional-pollutant loadings by facilities subject to effluent mulgated between 1992-1999, against 1992 levels (predicted by models).	260 M lbs	136 M lbs	
Explanation:	Goal met. EPA substantially met the goal of reducing industrial discharges of the three classes of pollutants. Targets were based on model projections of effluent guidelines, having to estimate both the facility universe and the number of permits developed. The actual number of issued permits in different industry sectors resulted in greater than expected reductions in conventional pollutants, and less than expected reductions in non-conventional pollutants.			
Data Source:	The Permit Compliance System (PCS) is the principle compliance tracking system governing EPA's supervision of the National Pollutant Discharge Elimination System (NPDES) permit program. It contains data from EPA and states on Wastewater facility NPDES permits.			
Data Quality:	Ongoing quality action/quality control safeguards include EPA review of state databases that serve as key data sources. However, there are known inconsistencies between state/federal records, particularly for minor facilities, and previous EPA Office of Inspector General audits have discussed the need for fresher data. EPA is engaged in a major modernization of the PCS system and databases.			
FY 2000 APG 18	<ul> <li>Develop modeling, monitoring, and risk management methods that enable planners and regulatory officials to more accurately characterize receiving and recreational water quality and to select appropriate control technologies.</li> </ul>			
(FY 1999)	By 2003: Deliver support tools, such as watershed models, enabling resource planners to select consistent, appropriate watershed management solutions and alternative, less costly wet-weather flow control technologies.			Target year is FY 2003
	, ,	1		
Performance Me	asure			

Goal
2.
Clean
and
Safe
Water

<b>5</b> 1/ 0000	4400U41 PERFORMANCE COAL C 4400 ME40UREO	FY 2	000	FY 1999
FY 2000	ANNUAL PERFORMANCE GOALS AND MEASURES	Planned	Actual	Actual
Explanation:	Goal met. EPA met this goal by completing research linking urban storm water management models to a geographic information system, which will assist in the development of improved safety guidelines and pollution indicators that states, local municipalities, and tribes can use to monitor recreational waters in a cost-effective way. Improving the characterization of recreational water quality will provide important input to the development of guidance in state, tribal, and local implementation of beach monitoring and notification programs designed to reduce human exposure to waterborne microbials and protect the public health.			
Data Source:	Same as FY 2000 APG 11.			
Data Quality:	Same as FY 2000 APG 11.			

### FY 1999 ANNUAL PERFORMANCE GOALS (NO LONGER REPORTED FOR FY 2000)

- EPA will issue and begin implementing two protective drinking water standards for high-risk contaminants, including disease-causing micro-organisms (Stage I Disinfection/Disinfection By-products and Interim Enhanced Surface Water Treatment Rules).
- 4,400 community water systems will be implementing programs to protect their source water (an increase of 1,650 systems over 1998).
- EPA will provide funding to restore wetlands and river corridors in 30 watersheds that meet specific "Five Star Project" criteria relating to diverse community partnerships (for a cumulative total of 44 watersheds).
- More than 220 communities will have local watersheds improved by controls on combined sewer overflows (CSO) and storm water
- In support of the Clean Water Action Plan, ten additional states will upgrade their nonpoint source programs, to ensure that they are implementing dynamic and effective nonpoint source programs that are designed to achieve and maintain beneficial uses of water.

# Roal 3 FY 2000 Obligations \$75M Note: EPA FY 2000 Obligations were \$8,974 million

### **GOAL 3: SAFE FOOD**

The foods Americans eat will be free from unsafe pesticide residues. Children especially will be protected from the health threats posed by pesticide residues because they are among the most vulnerable groups in our society.

### **OVERVIEW**

Americans have one of the safest, most abundant, and affordable food supplies in the world as a result of work done by federal, state, and local governments to manage and control the risk posed to human health by pesticide residues on food. The use of pesticides in agricultural production and food processing contributes significantly to that safety, abundance, and affordability. Ensuring that food remains safe for consumption, however, requires constant diligence on the part of pesticide producers, users, and regulatory agencies in the manufacture, labeling, storage, review, approval, and use of pesticides. EPA continues to protect the nation's food supply by reviewing all new and existing pesticides, making determinations about their safety, and denying or restricting the use of pesticides that do not meet current health or ecological standards.

The Agency addresses risk from pesticides when it registers new pesticides or reregisters older pesticides, ensuring that each pesticide meets current health and environmental protection standards and that product labeling includes complete, up-to-date, easily understandable use instructions and precautions. The reregistration program reevaluates the safety of pesticides initially registered before November 1984. To mitigate risk in cases where data indicate that a pesticide does not meet current human health and environmental standards, EPA can modify or restrict the allowable uses, including canceling use or allowing use only by a certified applicator or under supervision of a certified applicator.

In FY 2000 protection of infants, children, and other vulnerable groups remained a high priority for the Agency. EPA applies an extra tenfold safety factor (for food use pesticides) in risk assessments to account

for children's special vulnerabilities, unless scientific data indicate that a different factor is warranted, and considers special dietary patterns of groups such as Native Americans, urban poor, and farm families. The Agency is continuing to update and improve its pesticide toxicity testing guidelines and other assessment tools.

In FY 2000 the Agency made further progress toward its strategic goal through a combination of regulatory, outreach, and partnership activities, including the following: (1) continuing to register new pesticides and reregister existing pesticides, emphasizing reevaluation of existing pesticides that pose the greatest health risks, and accelerating the registration of lower-risk alternatives; (2) training and educating pesticide users and applicators; and (3) encouraging the development and adoption of alternative means of pest control, including the use of nonchemical approaches and lower-risk pesticides.

### **FY 2000 PERFORMANCE**

### **Reducing Agricultural Pesticide Risk**

Approximately 20,000 pesticides products are currently registered or licensed for use in the United States. Pesticide products are used in or on food, around homes, businesses, schools, hospitals, and in parks. Before EPA registers a pesticide product for sale and use, the Agency evaluates test data on all of its ingredients. The test data, which include studies on the effects the product will have on humans, wildlife, fish, and plants (including endangered species), are provided by the registration applicant (known as the registrant). Depending on the type of pesticide, a registrant may be required to generate data from as many as 100 different tests in order for the Agency to determine the product's safety.

EPA is developing and evaluating improved methods to estimate human exposure to and risk from pesticides. The Agency has made considerable progress in improving its risk assessments by incorporating the latest scientific methods. For example during FY 2000 EPA published for public comment 14 draft or revised science guidelines and policy papers that describe how EPA scientists will evaluate aggregate exposure, cumulative risk, and other science policy issues when they assess pesticides under the Food Quality Protection Act (FQPA). The Agency also convened the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) Scientific Advisory Panel six times to consult on these subjects with external scientists. Additionally the Agency consulted with stakeholders through the Tolerance Reassessment Advisory Committee and the new Committee to Advise on Reassessments and Transition, held a public technical meeting on cumulative risk, and held several public meetings on individual chemicals. Broadening stakeholder input helps the Agency gain cooperation from industry and growers in developing and implementing reduced risk agricultural practices.

Recognizing the need to develop methods that directly measure or reliably estimate these risks on a national or regional basis, EPA must currently use a variety of program activities as surrogate indicators of progress, one of which is the processing of registration applications. The Agency, in partnership with Florida State University, is working to develop a strategy for building baseline data and national environmental indicators with the ultimate goal of replacing the surrogate indicators of progress with those that reflect health effects associated with pesticides. The strategy document is expected during FY 2002.

EPA identified and solicited public comment on several new program progress indicators, including food pesticide residue data collected by the U.S. Department of Agriculture (USDA) to track reductions in the occurrence of residues of neurotoxic and carcinogenic pesticides on foods frequently eaten by children. Such indicators will help EPA to better target its limited resources to obtain the best results.

EPA completed 13 pesticide registrations for several reduced-risk pesticides. Pesticide usage data indicate that increased availability of lower-risk pesticides, combined with public demand for safe food, encourages pesticide producers and users to shift to reduced-risk alternatives.

## REDUCING RISK THROUGH REGISTRATION OF REDUCED-RISK PESTICIDES

Harpin Protein. This biopesticide has the potential to be an important human health and environmental risk reduction tool. Harpin is a class of protein produced naturally. It triggers the plant's natural defense mechanism rather than directly interacting with the pest organism. For this reason, organisms are not expected to develop resistance to Harpin. Harpin is effective against certain viral diseases for which there are no other controls. It also protects against soil-borne pathogens and pests (nematodes and fungi) that have few potential controls other than methyl bromide, an ozone-depleting chemical. Approved uses include all food commodities, trees, turf, and ornamentals.

New Uses for Spinosad and Glyphosate. During FY 2000 EPA staff collaborated with USDA to design a more efficient strategy for developing and applying residue data needed to establish tolerances for the reduced-risk chemicals Spinosad and Glyphosate on more than 200 crops, including many children's foods. This effort cut data development time by 2 to 3 years for many of these uses, allowing EPA to register the additional uses of these two lower-risk pesticides in FY 2000. These changes also resulted in a direct savings of \$1 million to the federally and state-funded program that developed the data. Through these streamlined registration actions, more than 150 crops may now be treated with Spinosad and approximately 250 crops may now be treated with Glyphosate instead of other, higher-risk pesticides.

As the use of reduced-risk alternatives increases, they may also become more affordable.

Because of public concern over various aspects of biotechnology (e.g., pest resistance, allergens, genetic alteration), EPA began a scientific and public review of the current registrations for certain genetically engineered corn and cotton varieties, commonly referred to as Bt corn and Bt cotton. The Agency also extended the existing registrations of Bt cotton and Bt corn plant pesticides until September 30, 2001, to allow ample time for this comprehensive review. EPA will use this comprehensive approach to ensure that decisions are based on the best available scientific analysis and that opportunity is provided for an open

dialogue with the public regarding Bt products. To ensure that all viewpoints are represented, EPA will seek input from the public from the FIFRA Science Advisory Panel, and through a review being led jointly by the Council on Environmental Quality and the White House Office of Science and Technology Policy. In addition in FY 2000 the Agency worked diligently to finalize the plant pesticide rule. EPA believes that the rule, first proposed in 1994, will clarify the status of plant-incorporated protectants under FIFRA. Plant incorporated protectants can serve as lower risk alternatives to conventional pesticides used on foods. The final rule, expected in FY 2001, will reflect careful consideration of all public comments and relevant scientific data.

### Reducing Use on Food of Pesticides Not Meeting Health Standards

Since 1988 EPA has been conducting a comprehensive review of the risks associated with pesticides initially registered before November 1, 1984. In FY 1996 FQPA added a new dimension to the pesticide reregistration program. Under FQPA, EPA evaluates pesticides to assess whether use of the pesticides in accordance with their label instructions presents "reasonable certainty of no harm." After completing a review and ensuring that the pesticide does not present human or environmental health threats, the Agency issues a Reregistration Eligibility Decision (RED). In cases where the reviews indicate that pesticides do not meet health and environmental

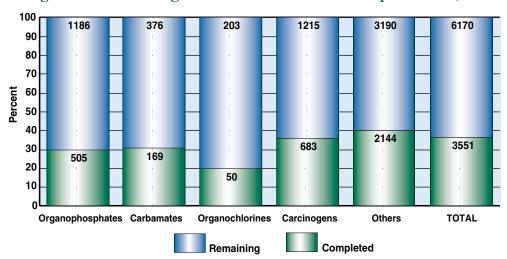
requirements, EPA can modify the allowable uses of pesticides, including canceling use or limiting use to certified applicators. FQPA also sets stricter safety standards for pesticide residues in or on food and it requires EPA to reassess all existing tolerances within 10 years to ensure they meet the new safety standard.

In FY 2000 EPA continued to reduce human health risks (through substitution of these chemicals with safer pesticides, tolerance reassessments, and reregistration) from organophosphates and other high-risk pesticides, such as organochlorines, carcinogens, and carbamates. Because organophosphates are widely used, accounting for more than half of all food crop insecticides used in the United States, and can adversely affect the human nervous system, EPA views the reassessment of these products as a major step in risk reduction. EPA is committed to ensuring a safe and abundant food supply for Americans and recognizes that restricting use of widely used pesticides in the absence of appropriate alternatives could compromise this commitment. In FY 2000 the Agency worked in collaboration with USDA to obtain a broad range of stakeholder and public comments on its risk assessments for the organophosphate pesticides. EPA also held a number of open, public technical briefings to communicate risk concerns and obtain the views of stakeholders.

EPA made substantial progress in reviewing individual organophosphates and carbamate pesticides and characterizing their risks. The six REDs EPA completed in FY 2000 incorporate various risk-reduction measures, such as allowing use of certain

products only by certified applicators, canceling pesticide products or deleting uses, limiting the amount or frequency of use, requiring additional personal protective equipment or other worker protection measures for applicators such as improving use directions and precautions, and/or employing groundwater or surface water protection.





Status of the EPA's tolerance reassessment program, by chemical class. In total, 3, 551 tolerances (37% out of a total of 9,721) have been reassessed. Thus EPA is more than one-third complete with progress on reassessing tolerances, including high-risk chemicals such as organophosphates, carbamates, organochlorines, and carcinogens.

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### RISK MITIGATION ON ORGANOPHOSPHATES

Chlorpyrifos. EPA reached an agreement with pesticide manufacturers to eliminate and phase out certain uses of the organophoshate chlorpyrifos—the active ingredient in Dursban, one of the most heavily used household insecticides. This agreement will significantly reduce risk from food and residential uses, particularly to children. The agreement lowers or revokes tolerances on apples, tomatoes, and grapes; classifies new end-use products as restricted use; and reduces drinking water risk through phaseout or cancellation of most indoor/outdoor residential uses, which are major contributors to drinking water contamination.

Bensulide. EPA's review of bensulide, an organophosphate herbicide used on vegetable crops, ornamentals, and turf, found that dietary risk from residues on food was low but that aggregate risk could be significant when potential drinking water exposures through runoff from turf applications were considered. EPA worked to mitigate the risk of bensulide by prohibiting handheld application methods and treatment of large turf areas, adopting label changes, and restricting the number and timing of golf course applications.

Regulation of antimicrobial pesticides is another arena in which EPA contributes to ensuring the safety of America's food supply. During FY 2000 the Agency convened an interagency panel to review a procedure for evaluating the efficacy of consumer products intended to control disease-carrying organisms on fresh fruits and vegetables. EPA also initiated a review of procedures to evaluate the efficacy of antimicrobial agents claimed to reduce the number of disease-carrying organisms in food processing, water, and in air. Other ongoing efforts related to antimicrobial pesticides include work with stakeholder groups and scientific experts to (1) develop performance standards and efficacy tests for registering treated articles (such as cutting boards, kitchen sponges, cat litter, toothbrushes, and toys) associated with human health claims and (2) refine registration requirements and performance standards for products that claim to control human pathogens in medical waste. EPA's investments in expanded outreach and communication concerning antimicrobial pesticides have proven invaluable in providing up-to-date information to the public in

instances like the FY 2000 recall of certain cleaning products found to cause respiratory symptoms in some users. The National Antimicrobial Information Network, which provides a wide variety of information about antimicrobials through a toll-free telephone number (1-800-447-6349) and the Internet (http://www.ace.orst.edu/info/nain/), is an example of the communication tools available.

### **SUMMARY OF FY 2000 PERFORMANCE**

Through successful, collaborative integration of regulatory, outreach, and partnership activities, EPA made progress in ensuring that food is free from unsafe pesticide residues, especially where children are concerned. The Agency continued using the best available science in the review of new and existing pesticides. EPA also continued to expedite the registration of reduced-risk pesticides and to review the highest-risk existing pesticides first, canceling or otherwise restricting use of pesticides that do not meet the current health standards. Additionally the Agency encouraged greater public awareness about the precautions people should take in the proper preparation and handling of food. These actions played an important part in moving the Agency toward its strategic goal to improve food safety.

### **RESEARCH CONTRIBUTIONS**

In FY 2000 EPA conducted research to develop and improve methods and models that predict, estimate, and measure health effects resulting from exposure to pesticides. Developing improved methods to detect, characterize, and quantify pesticide exposures in infants, children, and other susceptible subpopulations is an important focus of this research. The FQPA has expanded EPA's pesticide risk assessment research, particularly in the area of evaluating aggregate exposures to pesticides from multiple sources and the cumulative risk posed by multiple pesticides that share a common mechanism of toxicity. In FY 2000 research centered on providing methods and models to evaluate the risk to human health posed by food-use products. One of the most important activities was the revision of a first generation, multimedia, multipathway pesticide exposure model that identifies critical exposure pathways and factors for infants and young children. Future research will continue to focus on the development of risk assessment methods and models

Goal 3: Safe Foo

for susceptible populations, but will also include a greater emphasis on the development of new exposure and effects data to address the key issues and science needs of cumulative risk.

### **PROGRAM EVALUATION**

The General Accounting Office (GAO) assessed how EPA protects children's health and addresses their special vulnerability to pesticides in the report Children and Pesticides: New Approach to Considering Risk Is Partly in Place (HEHS-00-175). This investigation addressed the progress EPA has made in considering aggregate exposure and the cumulative effects of pesticides, as well as the progress made in reassessing tolerances for pesticide residues. GAO found that EPA has put in place interim procedures to address aggregate exposure and that methods for addressing cumulative risk are being developed. When complete, the methods will be implemented on a group of chemicals considered to be of potentially high risk. To address GAO concerns, EPA is giving special attention to the foods children most frequently eat (http://www.gao.gov).

### ASSESSMENT OF IMPACTS OF FY 2000 PERFORMANCE ON FY 2001 ANNUAL PERFORMANCE PLAN

The Agency's FY 2000 target for tolerance reassessments was not met due in part to the continuing development of the cumulative risk methodology. The Agency has already done a substantial amount of work on many tolerances but cannot call the tolerances fully reassessed because of the pending development of the Agency's cumulative risk policy. Once the cumulative risk policy has been approved (expected by the end of FY 2001) and applied to the tolerance reassessment process, the Agency expects to increase the pace of tolerance reassessments. Therefore the Agency will revise its FY 2002 Annual Performance Goal (APG) for tolerance reassessment upward so that the Agency will be on track to meet the statutory requirement of 66 percent of existing tolerances reassessed by 2002. The Committee to Advise on Reassessments and Transition, which began in FY 2000, will continue to add diverse stakeholder input to EPA's decision-making process. Lessons learned from the organophosphate pesticide review process, particularly the need for better data and collaboration among stakeholders, will be

applied to the evaluation of other high-risk pesticides in FY 2001. The FQPA requirement to address the cumulative risk of all pesticides sharing a common mechanism of toxicity will continue to affect EPA's tolerance assessment completions in FY 2001. In addition, the Agency is revising its 2001/2002 targets upwards for several registration outputs to better reflect process improvements made since 1997.

### TABLES OF RESULTS

The following tables of results includes performance results for the two FY 2000 Congressional APGs that appear in Goal 3. In cases where the FY 2000 APG is associated with a FY 1999 APG, the table includes the FY 1999 APG below the FY 2000 APG for ease in comparing performance.

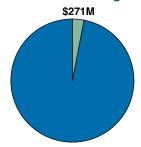
FY 2000 ANNUAL PERFORMANCE GOALS AND MEASURES				
•		Planned	Actual	Actua
I	BY 2005, THE RISK FROM AGRICULTURAL USE OF PESTICIDES WILL BY 50 PERCENT FROM 1995 LEVELS.	BE REDUC	ED	
FY 2000 APG 19:	Decrease adverse risk from agricultural uses from 1995 levels and assure that new pesticides are safe by such actions as registering 6 new chemicals, 2,200 amendments, 600 me-toos, 200 new uses, 45 inerts, 375 special registrations, 225* tolerances and 13 reduced risk chemicals/biopesticides.	6 2,200 600 200 45 375	6 3,069 1,106 427 95 458	7 3,586 1,022 681 109 455
(FY 1999)	Decrease adverse risk from agricultural pesticides from 1995 levels and assure new pesticides that enter the market are safe for humans and the environment.	225 13	452 16	351 19
Explanation:	Goal met. Pending availability of improved indicators, the Agency uses the processing of registration applications as surrogate measures. In partnership with Florida State University, the Agency is refining environmental indicators for pesticide programs and is analyzing ways to measure risk posed by agricultural uses of pesticides. It is likely that the risk will be inferred by examining usage levels of safer "reduced-risk" pesticides, using 1995 (pre-Food Quality Protection Act) as a baseline. Revised perfomance indicator/measure is expected in FY 2002.			
	*The APG for FY 2000 contained in the FY 2001 Congressional Justification erroneously included 105 tolerances, yet indicated 225 tolerances as the planned performance measure target for 2000. The correct number of tolerances for the 2000 APG is 225. In this report, EPA is referencing 225 tolerances, as written in the FY 2001 Congressional Justification as a performance measure target for 2000.			
Data Source:	The Pesticide Regulatory Action Tracking System is designed to collect and track information submitted by the regulated industry to support a pesticide registration application.			
	The Tolerance Index System (TIS) contains information on current tolerances, crop residues by crop and crop group for food and feed use.			
Data Quality:	EPA conducts internal senior management reviews of data contained in pesticide tracking systems. EPA is developing two databases: (1) Office of Pesticide Program Information Network (OPPIN) to consolidate pesticide data into one system and (2) the National Pesticide Residue Database (NPRD), in conjunction with the Food and Drug Administration, U.S. Department of Agriculture, and the states of California and Florida, to automate validation of data submissions. The NPRD is being created in response to a recommendation by the National Academy of Science (NAS) Report Pesticides in the Diets of Infants and Children, 1993. The report provided the findings by NAS National Research Council Committee on its examination of the adequacy of present risk assessment methods and policies and toxicologic issues of most concern to children. One of the findings was that there was no comprehensive data source on pesticide residue levels in the major foods consumed by infants and children. The purpose of the database is to have a single national repository of pesticide residue monitoring data with consistent/standardized reporting of data.			

### FY 2000 ANNUAL PERFORMANCE GOALS AND MEASURES

FY 2	000	FY 1999
Planned	Actual	Actual

	INNUAL PERFORMANCE GOALS AND MEASURES			
		Planned	Actual	Actua
BY 2005, USE ON FOOD OF CURRENT PESTICIDES THAT DO NOT MEET THE NEW STATUTORY STANDARD OF "REASONABLE CERTAINTY OF NO HARM" WILL BE SUBSTANTIALLY ELIMINATED.				
FY 2000 APG 20:	EPA will reassess 20% of the existing 9,721 tolerances to ensure that they meet the statutory standard of "reasonable certainty of no harm."	1,250	121*	
(FY 1999)	Under pesticide reregistration, EPA will reassess 19% (or 1,850) of the existing 9,700 tolerances (cumulative 33%) for pesticides food uses to meet the new statutory standards of "reasonable certainty of no harm."			1,44
Explanation:	Goal not met. As of September 2000, the Agency had completed 3,430 (or 35%) of the statutorily mandated 9,721 tolerances. Despite the FY 2000 performance, the Agency expects to meet the Food Quality Protection Act (FQPA) August 3, 2002 statutory deadline of 66% of tolerances reassessed (6,415) and 100% assessed by August 2006. Although the actual results are less than the targets, the Agency has already done a substantial amount of work on many tolerances. However, the Agency cannot call the tolerances fully reassessed because of the pending development of the Agency's cumulative risk policy.			
	*In FY 2000 EPA targeted the organophosphate pesicides (OPs) for tolerance reassessment. Because the OPs share a common mechanism of toxicity, a cumulative risk assessment across all of the OPs is required before the reassessment of their tolerances is completed. This extra stage of cumulative assessment was not needed for the tolerances reassessed in FY 1999. The cumulative assessment requires that EPA establish a cumulative risk policy, which has taken the Agency longer than first anticipated. EPA now expects to issue that policy by the end of FY 2001. Following that the Agency will be able to complete the reassessment of all of the OP tolerances, producing a surge of reassessments completed in FY 2002. EPA is on schedule to meet the statutory deadline of 66% of all tolerances reassessed by August 3, 2002.			
Data Source:	Same as FY 2000 APG 19.			
	Tolerance Reassessment Tracking System contains records on all 9,721 tolerances subject to reassessment from all sources. Data is extracted from the TIS and contains the numbers of total tolerances reassessed and the results of the reassessments (i.e., number of tolerance levels raised, revoked, or decreased).			
		1		1

### Goal 4 FY 2000 Obligations



Note: EPA FY 2000 Obligations were \$8,974 million

# GOAL 4: PREVENTING POLLUTION AND REDUCING RISK IN COMMUNITIES, HOMES, WORKPLACES AND ECOSYSTEMS

Pollution prevention and risk management strategies aimed at costeffectively eliminating, reducing, or minimizing emissions and contamination will result in cleaner and safer environments in which all Americans can reside, work, and enjoy life. EPA will safeguard ecosystems and promote the health of natural communities that are integral to the quality of life in this nation.

### **OVERVIEW**

A preventive, multimedia approach, focusing on potential risks to human health and the environment from exposure to pesticides in homes, schools, communities, workplaces, and the ecosystem, is central to EPA's strategy for protecting the public and the environment from the complex array of pollutants and threats imposed by industrial society. Preventing pollution before it causes harm can be cheaper and smarter than cleaning it up afterward. Cooperative and voluntary activities, including releasing data on the risks posed by pesticides and industrial chemicals; encouraging the use of safer alternative technologies,

### **WEST NILE VIRUS**

In FY 2000 EPA addressed the potential threat to the public from mosquito-borne viruses such as the

West Nile virus, which can cause encephalitis. In 1999 there were more than 60 reported cases of West Nile encephalitis and some deaths. EPA engaged in a broad, preemptive communication strategy to provide information on the risks and benefits of pesticide applications for



mosquito control before and during major outbreaks. Communication products were targeted to the public, states, localities, pesticide registrants, formulators, handlers, applicators, the U.S. Department of Health and Human Services, the U.S. Department of Agriculture, environmental groups, and other interested parties. EPA also ensured that states and localities applied pesticides according to proper application methods to protect the public from pesticide exposure.

chemicals, and farm practices; and promoting industrial processes that use less hazardous materials or recycle, are a vital part of EPA's pollution prevention strategy. In conducting these activities, EPA emphasizes protecting children who can be more susceptible than adults to injury from exposure to hazardous compounds. EPA's pollution prevention efforts involve many Agency programs, including those for pesticides, chemical management, indoor air pollution, waste management, and research. In addition many pollution prevention activities require sharing responsibilities with other federal, state, and tribal agencies, private industry, and nonprofit organizations. EPA's efforts with these partners have led to reduced risk in communities, homes, workplaces, and ecosystems.

### **FY 2000 PERFORMANCE**

### Reducing Risk from Pesticides and Other Chemicals

EPA made substantial progress during FY 2000 in reducing the risks posed by pesticides and other chemicals by promoting improved pesticide management practices, implementing the lead hazard reduction program, and gaining commitments from industry to participate in the High Production Volume Challenge Program.

### **Pesticides**

EPA worked with various pesticide user groups and other stakeholders to ensure that safer pest management practices are used in agriculture, homes, and public buildings (including schools). For example EPA continued to partner with farmers, researchers, and agribusiness to encourage the use of innovative and economical methods for reducing pesticide risks.

### EXAMPLES OF INNOVATION IN REDUCING PESTICIDE RISK

(These projects are described at <a href="http://www.epa.gov/oppbppd1/PESP/">http://www.epa.gov/oppbppd1/PESP/</a>.)

The Pineapple Growers Association of Hawaii is using a new innovative injection sprayer that releases herbicides only where they are needed. The Association is also testing a "living mulch" grass cover crop that is stunted in height and out-competes other weeds.

The Glades Crop Care, Inc. in Florida has found that their pepper growers can spend 63 percent less money on pest management by making fewer applications of pesticides, applying chemicals that are much less environmentally disruptive and by using a more biointensive pest management program. In addition, these same growers ended up using 43 percent less pesticides on their pepper crop.

The New York City Board of Education reduced pesticides in their schools by 33 percent in the 2000 school year. This school year (September 2000), they are only using boric acid and baits. The Department avoids any and all use of pesticide products in classrooms and other areas where students might be exposed to potentially harmful levels of pesticides.

The Mint Industry Research Council promotes the use of predatory mites to control spider mites and the use of clean rootstock that will prevent the introduction of diseased material into new fields at the time they are being established.

In addition, EPA collaborated with Canada's Pest Management Regulatory Agency to develop an exam of core principles for pesticide applicators to be incorporated into existing pesticide applicator certification and training programs in both countries. EPA is also working with the states and tribes to establish a framework for better managing pesticides that are likely to leach into groundwater.

### Lead

By the end of FY 2000 EPA had authorized a total of 38 programs (34 states, two tribes, the District of Columbia, and Puerto Rico) to train and certify lead-based paint abatement professionals to help ensure that those engaged in abatement projects work to minimize lead exposure. EPA began operating such programs in

the remaining states and three territories. EPA implemented the Pre-renovation Notification Rule, which requires people who perform renovation for compensation to distribute a lead hazard information pamphlet before starting the work. The Agency also promulgated the Lead Hazard Rule, which establishes uniform, national standards for lead in paint, dust, and soil in pre-1978 housing and child-care facilities.

### The High Production Volume (HPV) Challenge Program

High production volume chemicals are those that are manufactured or imported into the U.S. in amounts of one million pounds or more. The HPV Challenge Program is addressing deficiencies in the public availability of basic health and environmental hazard data for 2,800 HPV chemicals so that scientists, policy makers, industry, and the public can make sound judgments about the potential risks from these chemicals to people and the environment. The program made progress in FY 2000 by significantly increasing the number of companies and sponsored chemicals in the program from last year's level. Four hundred and sixty-nine companies have committed publicly to making screening-level hazard data on 2,155 chemicals available by 2005. EPA has already received some data, which are provided on the Chemical Right to Know web site (www.epa.gov/chemrtk).

### **Green Chemistry**

In FY 2000 EPA advanced pollution prevention and industrial ecology through the Green Chemistry Challenge Awards Program, which recognizes and supports innovative chemical processes that accomplish pollution prevention through source reduction. In FY 2000 EPA received 50 percent more nominations for the awards than its target of 50 applications/ nominations. Six awards were made in five categories, including those for designing safer chemicals, academic contributions, and small businesses. As an example, one award was made to Dow AgroSciences for the development of the Sentricon<sup>TM</sup> Termite Colony Elimination System. Each year as many as 1.5 million homeowners in the United States experience a termite problem and seek a control option. Sentricon<sup>TM</sup> represents a novel technology enabling an Integrated Pest Management approach by using monitoring and targeted delivery of a highly specific bait. It delivers high technical performance, environmental compatibility, and reduced human risk through the use of very small quantities of the control agent. For specific information on other awards made in FY 2000, see the Green Chemistry Home Page (www.epa.gov/greenchemistry).

### **Asbestos**

A 1999 consumer scare over asbestos-contaminated vermiculite prompted EPA to undertake an analysis of the level of asbestos in vermiculite. Vermiculite is a product whose absorbent properties make it useful in lawn and garden, agricultural, and horticultural products. EPA's analysis found that consumers face only a minimal health risk from using vermiculite products at home or in their gardens. However, because the analysis showed that occupational vermiculite exposure might be higher, EPA provided the analysis to the Occupational Safety and Health Administration (OSHA) for further study. In FY 2000 EPA also proposed extending the Asbestos Worker Protection Rule issued under the authority of the Toxic Substances Control Act. The extension is intended to extend protection from the risks associated with asbestos exposure to state and local government workers in 27 states not otherwise covered by OSHA asbestos standards, or by OSHA-approved state Worker Protection plans, as well as employees in the automotive brake and clutch repair industry.

### **Endocrine Disruptors**

EPA did not begin testing chemicals in commerce for endocrine disruption in FY 2000, as was projected in 1999. The Agency found that assay systems and highthroughput pre-screening (HTPS) technology, which is an automated test system capable of detecting estrogen and androgen receptor interactions on thousands of chemicals, were not yet sufficiently developed for routine regulatory application for existing and new chemicals. EPA is now focusing on developing quantitative structure-activity relationship models to serve the purpose HTPS would have served and continues to monitor the progress of HTPS efforts for endocrine disruption elsewhere in the world. EPA was successful in initiating work on four screens, exceeding its goal of two, while continuing work on two screens it had initiated the previous year. The Agency anticipates completing work on all eight Tier 1 screens (Tier 1 screens detect chemical substances capable of interacting with the estrogen, androgen, and thyroid hormonal systems) by the end of 2003 and the additional five Tier 2 tests (Tier 2 tests confirm and characterize the interaction) by the end of 2005.

### **Achieving Healthier Indoor Environments**

In FY 2000 EPA took action to raise public awareness about the role of triggers of asthma in increasing the severity and frequency of asthma episodes in indoor settings. The action was part of the Childhood Asthma Initiative and focused particularly on low-income children. The Ad Council, which provides advertising campaigns for the public good, selected EPA for a multi-year partnership through which the Council is providing pro bono creative services to help the Agency develop a series of public messages about the relationship between indoor pollutants and asthma. EPA organized three Regional Asthma Summits for Managed Care to engage the managed care industry in efforts to include information about indoor asthma trigger control in their conventional medical management plans for asthma patients. The first National Asthma In-Home Education and Management grants competition produced two winning pilot projects, which received roughly \$100,000 each, to demonstrate the results of educating families with asthma sufferers about indoor asthma triggers in their homes.

A new public service announcement encouraging parents who normally smoke inside their homes to "go outside for your kids" won the prestigious Silver Screen Award for television advertising and leveraged more than \$14 million worth of donated air time. The announcement was co-sponsored by EPA with the

### PILOT FOR "BUY CLEAN"

EPA and the Western Massachusetts Coalition for Occupational Safety and Health are testing a pilot program called "Buy Clean" with the Chicopee School District. "Buy Clean" schools will evaluate products as varied as art, auto shop, and drafting classroom supplies, landscaping and renovation products, cleaners, chemicals used in chemistry laboratories, and other custodial and maintenance supplies, and purchase environmentally preferable products and services (where appropriate) to promote healthier indoor air in schools. Schools will consider health, environmental, and product effectiveness characteristics in making decisions on which products to purchase. The project is part of a pilot grant program to test "Buy Clean" in schools around the country. In addition, EPA is investigating incentives to encourage vendors to sell products that are more environmentally preferable at competitive prices.

Consumer Federation of America Foundation and the American Medical Association. The radio version played on 625 radio stations, and the print campaign ran in 281 newspapers across the nation. Environmental tobacco smoke (ETS) exposure increases the risk of lower respiratory tract infections such as bronchitis and pneumonia. EPA estimates that between 150,000 and 300,000 of these cases annually in infants and children up to 18 months of age are attributable to exposure to ETS (EPA 1992). ETS exposure is causally associated with increased risk of acute and chronic middle ear disease (World Health Organization 1999). The Agency estimates that 395,000 more children aged six and under are now living in homes where smoking is not permitted than in FY 1999 as a result of such education and outreach efforts.

EPA met its goal in FY 2000 to educate the public about the health risks of indoor radon exposure by collaborating with states through the federal radon grants program and working in partnership with nongovernmental organizations such as the National Environmental Health Association and the Consumer Federation of America Foundation. Indoor radon exposure causes an estimated 15,000 to 22,000 lung cancer deaths each year. Based on sales of radon mitigation fans, EPA estimates that as a result of various outreach activities some 52,000 residential radon mitigations took place in FY 2000, meaning that approximately 138,800 more people lived in homes where radon exposure has been reduced than last year. Moreover, based on information collected by the National Association of Home Builders, some 200,000 new homes were built in FY 2000 using radon-resistant construction techniques, preventing residential exposure to radon for 534,000 more people.

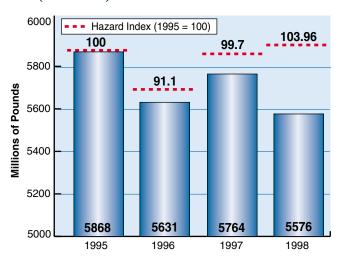
Contributing to EPA's effort to create healthier indoor environments for children in schools, an additional 5,000 schools in FY 2000 (representing about 2,600,000 students and staff) adopted the problem-solving and pollution prevention approaches to school indoor environments in the Agency's Indoor Air Quality Tools for Schools kit.

# Preventing Pollution, Reducing Waste, and Recycling

### Toxics Release Inventory (TRI)

One important measure of the nation's progress in fostering pollution prevention is the trend in the generation of non-recycled wastes covered by TRI. Waste generation measures are best suited for assessing source reduction efforts, as they are unaffected by the application of pollution control systems (e.g., waste treatment systems, incinerators, etc.) which reduce environmental releases but do not reduce or prevent generation of pollutants at their source. The generation of non-recycled wastes by those manufacturing industries that have been monitored over the last 8 years under TRI declined by 15.1 million pounds from 1997 to 1998, a 0.2 percent decline. When the change between 1997 and 1998 is normalized for increases in production by these industrial categories, the decrease represents a 4.1 percent reduction, which is more than double the FY 2000 performance target of a two percent annual production-normalized decline in the generation of non-recycled TRI wastes.

## Releases and Transfers of TRI Chemicals (1995-1998) and Associated Hazard Indices



Enhanced Chemical List Included; New 1998 Reporting Sectors Excluded

Other important measures of pollution prevention are the trends for the volume and toxicity of direct environmental releases and off-site transfers of chemicals covered by TRI. Release/transfer measures, unlike waste generation measures, are considered "end-of-pipe" measures that capture pollution levels after on-site pollution control or recycling/recovery technologies have been applied to generated wastes. The releases and off-site transfers from those manufacturing industries and chemicals that have been monitored since the TRI chemical reporting list was expanded in 1995 declined by 187.3 million pounds (3.2%) from 1997 to 1998. However, the toxicity of these wastes has increased from 1995 to 1998. [The hazard index is

determined by multiplying the release/transfer pounds for a chemical by the higher of the two toxicity weights (ingestion or inhalation) assigned to the chemical in EPA's Risk Screening Environmental Indicators model, and then indexing the resulting values; the index for the value from the year 1995 is 100.] Further discussion of the TRI Program is presented under Goal 7.

EPA's New Chemicals screening system (Pre-Manufacture Notice (PMN) requirements) and the Chemical Right to Know (CRtK) initiative may help to reverse the trend of increasing waste toxicity. The PMN process prevents manufacture of new chemicals determined to pose unreasonable human health or environmental risks. The Agency expects the CRtK Initiative, begun in FY 2000, to encourage industry to replace dangerous chemicals already in use by making hazard information publicly available by 2005 for nearly 2,155 HPV chemicals.

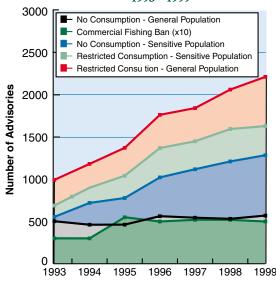
### Design for the Environment Program (DfE)

DfE continues to work with private sector partners to advance cleaner technologies. In 2000 EPA's effort helped achieve a cumulative 36 percent increase in the use of alternative cleaning technologies by the garment care industry over 1998 levels. Under the program, 14 safer cleaning products have been developed and marketed, including redesigned products that do not contain alkyl phenol ethoxylates (suspected endocrine disruptors). The foam furniture industry is investigating alternatives to the use of methylene chloride, a hazardous air pollutant for which OSHA has restricted use in foam adhesive applications. The dry cleaning industry has significantly reduced its use of perchloroethylene, which EPA has characterized as a probable human carcinogen.

### Persistent Bioaccumulative and Toxic (PBT) Initiative

The PBT Initiative seeks to reduce the use of priority PBT pollutants and their presence in the environment. In FY 2000 EPA released four National Action Plans for public comment. These plans address ongoing and planned reduction activities for Hexachlorobenzene; alkyl-lead; Octachlorostyrene; and a group of five canceled pesticides (Aldrin/Dieldrin, Chlordane, dichlorodiphenyltrichloroethane (DDT), Mirex, and Toxaphene). Additional efforts included finalizing the Mercury Action Plan, expanding the collection of monitoring data on PBTs in fish and in humans, funding 12 new state and regional reduction projects, evaluating more than 200 additional substances

### Fish and Wildlife Advisories by Type, 1993 - 1999



for PBT hazard levels, and launching the development of two coordinated Agency strategies for PBT monitoring and risk communication.

States, territories, and tribes issue consumption advisories to protect people living within their boundaries from potential health risks associated with the consumption of fish and wildlife from contaminated waterbodies. The advisories suggest that consumption of fish and wildlife from specific water bodies or water body types be restricted or avoided. PBT chemicals mercury, polychlorinated biphenyls (PCBs), chlordane, dioxins, and DDT—were at least partially involved in 99 percent of all advisories. Fish and wildlife from contaminated waterbodies can affect low-income people who fish and hunt their own food, Native American Tribes who have historically been highvolume consumers of fish and wildlife, and individuals who make the lifestyle choice to eat fish and wildlife in larger quantities than the consumer average.

The increase in fish consumption advisories from 1993 to 1999 generally reflects more monitoring and better assessment methods, and is not necessarily a result of worsening environmental conditions. For sensitive populations, "No consumption" advisories increased 132 percent and restricted consumption advisories increased 137 percent between 1993 and 1999. Over the long term, advisories for sensitive populations have increased more rapidly than advisories for the general population, which have remained relatively stable. EPA and its partners are addressing the presence of PBTs in the environment through programs under many Goals in the Agency Strategic

Plan; however, the advisory data indicate that much work needs to be done to ensure that those individuals who consume fish and wildlife in large quantities are protected from toxics in their food. Additional information pertaining to the advisories is found in Goal 2.

### **Recycling of Municipal Solid Waste**

Recycling of municipal solid waste (MSW) has continued to increase, and the diversion of more MSW from landfilling and combustion to recycling is higher than ever before. In 1998, the most recent year for which data are available, 28.2 percent of MSW was recycled, an increase of 0.8 percent from 1997. This figure means that more than 62 million tons of recyclables were diverted from disposal in 1998 alone. The increase bodes well for attainment of EPA's FY 2000 target (reflecting 1999 recycling) of 29 percent (64 million tons). Compared to the previous year, MSW generation increased in 1998 by 4 million tons, reaching a level of 220 million tons. Per capita generation remained stable at 4.4 pounds per day, slightly higher than the Agency's goal of 4.3 pounds per day.

### **Preventing Pollution on Tribal Lands**

An accurate assessment of current environmental conditions is critical to addressing environmental issues in Indian Country. In FY 2000 EPA collected basic environmental data for six percent of Indian Country, for a cumulative total of 16 percent. In a complementary effort, EPA regional offices are working with tribes to help implement environmental programs in Indian Country. In FY 2000, 16 tribes assumed EPA program responsibilities, exceeding the Agency's goal of 12 tribes. The total number of EPA programs operated by tribes is now 270. Also, by the end of FY 2000, 49 tribes had signed Tribal Environmental Agreements, which identify tribe-specific environmental priorities to address multimedia environmental concerns in Indian Country.

### **SUMMARY OF FY 2000 PERFORMANCE**

EPA and its partners made substantial progress toward achieving Goal 4 and its objectives. By the end of FY 2000 EPA had authorized 38 states, tribes, or territories to train and certify lead-based paint abatement professionals to help ensure that those engaged in abatement projects work to minimize lead

exposure. Of particular importance were the 469 companies that have committed to make screening-level hazard data available publicly on 2,155 HPV chemicals by 2005. Also in FY 2000, EPA's efforts helped to achieve a cumulative 36 percent increase in the use of alternative cleaning technologies by the garment care industry over 1998 levels. Finally EPA released four National Action Plans that address ongoing and planned reduction activities for five canceled pesticides as part of the initiative to reduce the use and presence of priority PBT pollutants in the environment.

# STRENGTHENING PROGRAM INTEGRITY THROUGH IMPROVED MANAGEMENT

In response to a continuing concern that the Agency needs to strengthen oversight provided for tribal grants (in particular, grants made with General Assistance Program funds), EPA assigned additional staff, developed improved guidance, and provided additional training to its grants management staff in FY 2000. Limitations that prevent the use of General Assistance funds for implementing environmental programs have been a barrier to tribes' assumption of programs and willingness to enter into substantive agreements.

### RESEARCH CONTRIBUTIONS

Research supports Goal 4 in the development or improvement of test guidelines for human health and ecological endpoints of regulatory concern under the Federal Insecticide, Fungicide, and Rodenticide Act and the Toxic Substances Control Act. In FY 2000 EPA developed a model to assess the susceptibility of infants' and children's developing immune systems to environmental contaminants. It will be an important tool for evaluating the impact of environmental stressors on human health and ecological endpoints. Understanding how environmental contaminants affect developing immune systems is particularly important because infants and children appear to be at greater risk than adults of experiencing adverse reactions when exposed to toxic substances.

### **PROGRAM EVALUATION**

The General Accounting Office (GAO) recently assessed the impact and effectiveness of several EPA activities dealing with children's health. In its November

1999 report, Pesticides: Use, Effects and Alternatives to Pesticides in Schools (RCED-00-17, http://www.gao.gov), GAO noted that although there is no comprehensive, nationwide information on the amount of pesticides used in schools, the Agency is considering conducting a survey on the use of pesticides in schools. GAO also determined that information is limited regarding shortand long-term illnesses related to pesticide exposure in all settings; however, EPA and the National Institutes of Health have initiated several studies to identify illnesses linked to pesticide exposure. To address potential exposure of children to pesticides, the Agency and the states have initiatives to encourage reduced use of pesticides in schools through Integrated Pest Management and the Pesticide Environmental Stewardship Program, as well as the use of reducedrisk pesticides.

GAO also assessed the implementation of the Worker Protection Standards and how well the Worker Protection Program protects children who might be exposed to pesticides in agricultural settings. GAO made several recommendations regarding worker protection in its report *Pesticides: Improvements Needed to Ensure the Safety of Farmworkers and Their Children* (RCED-00-40). EPA generally agrees that the recommendations are sound and intends to consider them during the assessment of the Worker Protection Program in FY 2001.

In FY 2000 EPA began the National Assessment of the Worker Protection Standard for pesticides. The assessment, a multi-phase process that will take place over the next 18 to 24 months, will help the Agency determine whether the Worker Protection Standard program is adequately meeting its intended goals of addressing the risks to agricultural workers. The initial public participation meeting was held in June 2000 in Austin, Texas. As a result of that meeting, a number of assessment themes or topic areas were identified for further consideration, including training, enforcement, complaint and retaliation, children's health, and communication.

EPA continued its evaluation of the certification and training program for pesticide applicators, which started in 1997 with the formation of the joint EPA-U.S. Department of Agriculture Certification and Training Assessment Group (CTAG). In FY 2000 states indicated the need for using a professional exam development process to improve their ability to

determine the competency of pesticide applicators. CTAG's work is leading to improvement in pesticide applicator exams, establishment of a pesticide safety education center for training educators and regulators, and development of a national core pesticide applicator certification exam for use by state regulators. Improving the certification and training program addresses risk at the source (pesticide applications).

### ASSESSMENT OF IMPACTS OF FY 2000 PERFORMANCE ON FY 2001 ANNUAL PERFORMANCE PLAN

EPA has reflected FY 2000 performance and advances in program measurement in its FY 2001 annual performance goals (APGs) and targets. The performance measure for environmental stewardship strategies (ESP) in the prevention of harmful pesticide exposure has been significantly increased for FY 2001, based on greater than expected performance in FY 2000. The program had revised the format and requirements for completing ESP strategies, which streamlined and accelerated the submissions and review processes. The FY 2001 APG for safer alternative cleaning technologies has been reworded to include a new measure, perchloroethylene reduction, which is a more reliable indicator of progress toward the APG than the percentage increase in the use of alternative cleaning technologies, the FY 2000 measure. In addition EPA is discontinuing its performance measure for tribal environmental agreements (TEAs) while it redefines the TEA process.

### TABLE OF RESULTS

The following table of results includes performance results for the nine FY 2000 APGs that appear in Goal 4. In cases where the FY 2000 APG is associated with an FY 1999 APG, the table includes the FY 1999 APG below the FY 2000 APG for ease in comparing performance.

### FY 2000 Annual Report Annual Performance Goals and Measures - Table of Results

Summary FY 2000 Performance			
4 Goals Met	2 Goals Not Met	3 Other	

# GOAL 4 - PREVENTING POLLUTION AND REDUCING RISK IN COMMUNITIES, HOMES, WORKPLACES, AND ECOSYSTEMS

### FY 2000 ANNUAL PERFORMANCE GOALS AND MEASURES

FY 2	000	FY 1999
Planned	Actual	Actual

109

0%

50%

71

10%

50%

69

0%

48%

BY 2005, PUBLIC AND ECOSYSTEM RISK FROM PESTICIDES WILL BE REDUCED THROUGH MIGRATION TO LOWER RISK PESTICIDES AND PEST MANAGEMENT PRACTICES, IMPROVING EDUCATION OF THE PUBLIC AND AT-RISK WORKERS, AND FORMING 'PESTICIDE ENVIRONMENTAL STEWARDSHIP'PARTNERSHIPS WITH PESTICIDE USER GROUPS.

FY 2000 APG 21: Protect homes, communities, and workplaces from harmful exposure to

pesticides and related pollutants through improved cultural practices and enhanced public education, resulting in a reduction (to be determined) in the incidence of pesticide poisonings reported

nationwide.

(FY 1999) Protect homes, communities, and workplaces from harmful exposure to

pesticides and related pollutants through improved cultural practices and enhanced public education, resulting in a reduction of 15% cumulative (1994 reporting base) in the incidence of pesticide poisonings reported nationwide.

#### **Performance Measures**

- Environmental Stewardship Strategies.
- Manage pesticides with high probability to leach/persist in groundwater.
- Labor population will be adequately trained (cumulative)\*.

#### **Explanation:**

Goal not met. Data now available do not allow a reliable estimate of the magnitude or trend in the national incidence of pesticide poisonings. Through the Chemical and Pesticide Results Measures project, which involves EPA, state, and industry stakeholders, EPA is developing an accurate reporting measure for pesticide poisonings, among other environmental indicators. EPA expects to develop this measure in FY 2002. The Pesticide and Groundwater State Management Plan Rule was delayed in regulatory review, which prevented the Agency from meeting its goal. It is unclear at this time when the rule will move forward, if at all. In spite of the delay in finalizing the rule, the Agency is on track to meet its long-term goal, which is to manage the risk of pesticides in groundwater. The Agency has refocused this performance measure in FY 2001 on significant pesticide management actions taken by EPA on the specific pesticides that are likely to leach and persist in groundwater. \*[Note: The FY 2001 President's Budget incorrectly characterized the target for the performance measure "labor population will be adequately trained" as a cumulative percentage instead of an annual percentage. Therefore the FY 2000 achievement is 50% of the labor population trained.]

Data Source:

Aggregation of training statistics from state cooperative extension services and Worker Protection Program. State Cooperative Extension Services represent the education and training arm of State Agriculture Departments that extend training programs to counties.

**Data Quality:** 

Training statistics are dependent on accurate record keeping at state or

county level.

No

FY 1999

APG

		FY 2	2000	FY 1999
FY 2000 A	ANNUAL PERFORMANCE GOALS AND MEASURES	Planned	Actual	Actual
BY 2005,TI	HE NUMBER OF YOUNG CHILDREN WITH HIGH LEVELS OF LEAD IN SIGNIFICANTLY REDUCED FROM THE EARLY 1990'S.	THEIR BLO	OOD WILL	BE
FY 2000 APG 22:	Administer federal programs and oversee state implementation of programs for lead-based paint abatement certification and training in 50 states, to reduce exposure to lead-based paint and ensure significant decreases in children's blood levels by 2005.	Target year is FY 2005		
(FY 1999)	Complete the building of a lead-based paint abatement certification and training in 50 states, to ensure significant decreases in children's blood lead levels by 2005 through reduced exposure to lead-based paint.			Target year is FY 2005
Explanation:	Through FY 2000 EPA continued building the lead-based abatement training and certification program. Programs for the training, accreditation and certification of lead-based paint abatement professionals were established in 38 programs (34 states, two tribes, the District of Columbia, and Puerto Rico). For 19 states that have chosen not to seek approval of a state program, a federal training, accreditation and certification program was established. Additional legal requirements for the tribes have delayed development of two of the four programs planned for FY 2000. EPA activities to reduce exposure to lead-based paint are on track to ensure significant decreases in children's blood levels by 2005.			
Data Source:	Data on blood lead levels in children are from the National Health and Nutrition Examination Surveys conducted by the Centers for Disease Control and Prevention. Annual surveys started in 1999.			
Data Quality:	Data quality issues are related to survey sampling bias and changes in survey questions from survey to survey.			
MICROORGAN INTRODUCTIO	2005, OF THE APPROXIMATELY 2,000 CHEMICALS AND 40 GENETICA ISMS EXPECTED TO ENTER COMMERCE EACH YEAR, WE WILL SIG ON BY INDUSTRY OF SAFER OR "GREENER" CHEMICALS WHICH WIFOR REGULATORY MANAGEMENT BY EPA.  Ensure that of the up to 1,800 new chemicals and microorganisms submitted by industry each year, those that are introduced in commerce are safe to humans and the environment for their intended uses.	NIFICANTL	Y INCREA	
(FY 1999)	Ensure that of the approximately 1,800 new chemicals and micro-organisms submitted by industry each year, those that are introduced in commerce are safe to humans and the environment for their intended uses.			1,717
Explanation:	Goal met.			
Data Source:	The New Chemicals Management Information Tracking System tracks requests submitted by industries for review of new chemicals. The requests include information on chemicals to be manufactured and imported,			

environmental	contaminants.
Explanation:	Goal met. A model to assess the susceptibility of the developing immune

- Develop an animal model to assess susceptibility of the developing immune system to

Goal met. A model to assess the susceptibility of the developing immune system to environmental contaminants was produced. The model is an

chemical identity, manufacturing process, use, worker exposure,

EPA reviews industry data and performs risk screening and assessments.

Provide methods and models to evaluate the impact of environmental

stressors on human health and ecological endpoints for use in

important tool for evaluating the impact of environmental stressors on human

health and ecological endpoints.

environmental releases, and disposal.

guidelines, assessments, and strategies.

**Data Quality:** 

FY 2000 APG 24:

**Performance Measure** 

1

EV 0000 1	NAME OF DESCRIPTION OF A SAME ASSESSED.	FY 2	FY 2000	
FY 2000 A	NNUAL PERFORMANCE GOALS AND MEASURES	Planned	Actual	Actual
Data Source:	Agency generated material.			
Data Quality:	As required by the Agency-wide formal peer review policy issued in 1993, and reaffirmed in 1994 and 1998, all major scientific and technical work products used in Agency decision making are independently peer reviewed before their use. EPA has implemented a rigorous process of peer review for both its in-house and extramural research programs. Peer review panels include scientists and engineers from academia, industry, and other federal agencies.			
BY 2005, 15 MI	LLION MORE AMERICANS WILL LIVE OR WORK IN HOMES, SCHOO WITH HEALTHIER INDOOR AIR THAN IN 1994.	OLS, OR OF	FICE BUIL	DINGS
FY 2000 APG 25:	890,000 additional people will be living in healthier residential indoor environments.	890,000	1,032,000	
(FY 1999)	700,000 additional people will live in healthier residential indoor environments.			1,322,00
Explanation:	FY 2000: Goal met. In FY 2000 there were 1,032,000 additional people living in healthier residential indoor environments. The target was exceeded because EPA's outreach efforts with builders to construct radon-resistant homes and outreach to the general public to mitigate radon were more effective than originally anticipated.			
	FY 1999: Goal met. Based on information received in FY 2000, EPA exceeded its FY 1999 targets. In FY 1999 the results were higher (than the planned target of 700,000) because outreach efforts were also more effective than anticipated.			
Data Source:	The National Association of Home Builders and the radon industry provide data on number of radon resistant homes built. The number of homes mitigated for high radon levels is obtained through voluntary industry reporting. The Centers for Disease Control provide data on the number of children under 6 years old not exposed to environmental tobacco smoke in the home.			
Data Quality:	Each of the data sources described above provides a reasonable estimate of public action on EPA activities.			
FY 2000 APG 26:	2,580,000 students, faculty and staff will experience improved indoor air quality in their schools.	2,580,000	2,600,000	No FY 1999
Explanation:	Goal met. An additional 5,000 schools (representing about 2.6 million students, faculty and staff) adopted the Agency's Air Quality Tools for Schools kit.			APG
Data Source:	EPA's Indoor Air Quality Tools for Schools Program is using a database to track the number of schools that receive the Tools for Schools kit and the number of schools implementing good indoor air quality practices consistent with EPA guidance.			
Data Quality:	Data on actions taken are voluntarily self-reported by school personnel which may limit accuracy. Interpretation of EPA's guidance may also vary among schools, which affects what the schools report.			
	CE BY 25% (FROM 1992 LEVEL) THE QUANTITY OF TOXIC POLLUTA , OR COMBUSTED FOR ENERGY RECOVERY. HALF OF THIS REDU THROUGH POLLUTION PREVENTION PRACTICES.			
FY 2000 APG 27:	The quantity of Toxic Release Inventory (TRI) pollutants released, disposed of, treated or combusted for energy recovery, (normalized for changes in industrial production) will be reduced by 200 millions pounds, or 2%, from 1999 reporting levels.	200 M lbs	Data available in FY 2002	

EV 0000 4	ANNUAL DEDEODMANOS COALS AND MEASURES	FY 2000		FY 1999
FY 2000 A	ANNUAL PERFORMANCE GOALS AND MEASURES	Planned	Actual	Actual
(FY 1999)	The quantity of Toxic Release Inventory pollutants released, treated, or combusted for energy recovery will be reduced by 200 million pounds, or 2% from 1998 reporting levels.			Data availabl in FY 200
Explanation:	FY 2000 data will not be available until 2002 due to time lags associated with reporting and analysis. The most recent data available show the generation of non-recycled wastes by those manufacturing industries that have been monitored over the last 8 years under TRI declined by 15.1 million pounds from 1997 to 1998, a 0.2% decline. When the change between 1997 and 1998 is normalized for increases in production by these industrial categories, the decrease represents a 4.1% reduction. Greater use of pollution prevention tools and techniques have lead to the continued trend of reduction in waste generation.			F1 200
Data Source:	Facilities reporting under TRI. For example, in FY 1997, 21,490 facilities filed 71,670 TRI reports. EPA is developing regulations for improving reporting of source reduction activities by TRI reporting facilities.			
Data Quality:	A recent General Accounting Office (GAO) report reviewed EPA's progress to implement source reduction reporting requirements, results of voluntary program to reduce emissions of 17 highly toxic chemicals, and activities to disseminate source reduction information to meet state and industry needs. Facilities reporting under TRI are identified by regulation and are a narrower category of facilities. TRI release data covers only a fraction of the total release. [Toxic Substances: EPA Needs More Reliable Source Reduction Data and Progress Measures (09/23/94, GAO/RCED-94-93)].			
BY 2005, E	PA AND ITS PARTNERS WILL INCREASE RECYCLING AND DECREATED.  TOXICITY OF WASTE GENERATED.	ASE THE QU	JANTITY A	ND
FY 2000 APG 28:	Divert an additional 1% (for a cumulative total of 29% or 64 million tons) of municipal solid waste from land filling and combustion, and maintain per capita generation of RCRA municipal solid waste at 4.3 pounds per day.	64 (29%) 4.3 lb	Data available in FY 2002	
	of municipal solid waste from land filling and combustion, and maintain per capita generation of RCRA municipal solid waste at 4.3 pounds per	, ,	available in	
(FY 1999)	of municipal solid waste from land filling and combustion, and maintain per capita generation of RCRA municipal solid waste at 4.3 pounds per day.  Maintain levels (for a cumulative total of 28% or 62 million tons) of municipal solid waste diverted from land filling and combustion, and maintain per capita	, ,	available in	availab in
<i>(FY 1999)</i> Explanation:	of municipal solid waste from land filling and combustion, and maintain per capita generation of RCRA municipal solid waste at 4.3 pounds per day.  Maintain levels (for a cumulative total of 28% or 62 million tons) of municipal solid waste diverted from land filing and combustion, and maintain per capita generation of RCRA municipal solid waste at 4.3 pounds per day.	, ,	available in	Data availab in FY 200
FY 2000 APG 28:  (FY 1999)  Explanation:  Data Source:  Data Quality:	of municipal solid waste from land filling and combustion, and maintain per capita generation of RCRA municipal solid waste at 4.3 pounds per day.  Maintain levels (for a cumulative total of 28% or 62 million tons) of municipal solid waste diverted from land filing and combustion, and maintain per capita generation of RCRA municipal solid waste at 4.3 pounds per day.  Analysis of FY 1999 data is anticipated by September 2001.  The baseline numbers for municipal solid waste (MSW) source reduction and recycling found in an EPA report titled "Characterization of Municipal Solid Waste in the United States" are developed using a materials flow	, ,	available in	availab in
(FY 1999)  Explanation:  Data Source:  Data Quality:	of municipal solid waste from land filling and combustion, and maintain per capita generation of RCRA municipal solid waste at 4.3 pounds per day.  Maintain levels (for a cumulative total of 28% or 62 million tons) of municipal solid waste diverted from land filing and combustion, and maintain per capita generation of RCRA municipal solid waste at 4.3 pounds per day.  Analysis of FY 1999 data is anticipated by September 2001.  The baseline numbers for municipal solid waste (MSW) source reduction and recycling found in an EPA report titled "Characterization of Municipal Solid Waste in the United States" are developed using a materials flow methodology employing data largely from the Department of Commerce.  The report, including the baseline numbers and current progress, is widely accepted among experts. Data limitations stem from the fact that the baseline and annual progress numbers are based on a series of models, assumptions, and extrapolations, and as such, are not an empirical accounting of MSW	4.3 lb	available in FY 2002	availab in FY 200
(FY 1999)  Explanation:  Data Source:  Data Quality:  BY 2003, 60%	of municipal solid waste from land filling and combustion, and maintain per capita generation of RCRA municipal solid waste at 4.3 pounds per day.  Maintain levels (for a cumulative total of 28% or 62 million tons) of municipal solid waste diverted from land filing and combustion, and maintain per capita generation of RCRA municipal solid waste at 4.3 pounds per day.  Analysis of FY 1999 data is anticipated by September 2001.  The baseline numbers for municipal solid waste (MSW) source reduction and recycling found in an EPA report titled "Characterization of Municipal Solid Waste in the United States" are developed using a materials flow methodology employing data largely from the Department of Commerce.  The report, including the baseline numbers and current progress, is widely accepted among experts. Data limitations stem from the fact that the baseline and annual progress numbers are based on a series of models, assumptions, and extrapolations, and as such, are not an empirical accounting of MSW generated or recycled.	4.3 lb	available in FY 2002	availab in FY 200

		FY 2000		FY 1999
FY 2000 ANNUAL PERFORMANCE GOALS AND MEASURES		Planned	Actual	Actual
Explanation:	Goal not met. The Agency met its goal of collecting a 6% of tribal baseline information by enabling a pilot demonstration model to access and display tribal information from 11 EPA databases and seven internal data collection surveys containing environmental information. However, only four of the projected 12 EPA/Tibal Environmental Agreements (TEAs) were signed. During FY 2000 the Agency clarified its definition of TEAs to provide consistency across the program. Only four TEAs met the clarified definition to count as FY 2000 achievements. While the target for TEAs was not met in FY 2000, the work done to clarify the elements of a TEA and to assure consistency across the nation will lead to more accurate and consistent reporting in 2001 and beyond.			
Data Source:	Data are collected from EPA National Data bases in Envirofacts and regional records on grant programs. Tribal office records on tribal and federally funded data collection and other assessment activities are also important sources. As needed, data are also sought from state records.			
Data Quality:	EPA reviews and analyzes the data limitations and gaps. For example it is expected that some parts of the environment are more thoroughly studied than others and some areas have more complete data than others. EPA in cooperation with the tribes determines the appropriate follow-up activities to address data inadequacies and gaps through contracting resources, grant work plans, and environmental program negotiations.			

### **Goal 5 FY 2000 Obligations**



were \$8,974 million

## GOAL 5: BETTER WASTE MANAGEMENT, RESTORATION OF CONTAMINATED WASTE SITES, AND EMERGENCY RESPONSE

America's wastes will be stored, treated, and disposed of in ways that prevent harm to people and the natural environment. EPA will work to clean up previously polluted sites, restore them to uses appropriate for surrounding communities, and respond to and prevent waste-related or industrial accidents.

#### **OVERVIEW**

Improper waste management and disposal threatens human health and the environment. Uncontrolled hazardous and toxic substances, including radioactive waste, migrate to the air, groundwater, and surface water, contaminating drinking water supplies for communities located miles from a waste site and potentially causing acute illnesses or chronic diseases. Hazardous and toxic substances present unique health threats to sensitive populations, such as children, senior citizens, and tribal communities that follow subsistence lifestyles. They can also significantly damage sensitive ecosystems. To protect against these risks, EPA has developed and implemented policies to clean up contamination at active and inactive waste disposal and management sites; promote safe waste storage, treatment, and disposal; and prevent spills and releases of hazardous and toxic materials. These policies are implemented through a number of EPA programs, usually conducted under the provisions of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA or Superfund) and the Resource Conservation and Recovery Act (RCRA). Goal 5 is on track to meet or exceed objectives outlined in the strategic plan.

#### **FY 2000 PERFORMANCE**

### **Ensuring Progress Through Effective and Efficient Cleanups**

### Superfund

EPA and its state and tribal partners use Superfund resources to provide emergency response to hazardous substance releases and to clean up inactive hazardous waste disposal sites. The Superfund process is often a multistage and multiyear effort that begins with a

preliminary assessment or site inspection to determine the actions needed to address threats at a site (including emergency removal actions) and moves through postconstruction activities, such as 5-year reviews, to ensure that remedies remain protective as site conditions, risk science, or cleanup technologies evolve. Considerable progress has been made in the program since EPA announced a third round of administrative reforms in 1995.

As a measure of achieving progress in hazardous waste cleanups, EPA has selected construction completion, the point at which a cleanup remedy is in place. During FY 2000, 87 Superfund sites reached construction completion, exceeding the Agency's goal of 85 sites, for a total of 757 sites over the life of the program on track with the long-term goal of achieving 900 construction completions by the end of FY 2002. The location and other information about these sites can be found at <a href="http://www.epa.gov/superfund/sites/query">http://www.epa.gov/superfund/sites/query</a>. More than 92 percent of the sites on the National Priorities List (NPL) are either undergoing cleanup construction or cleanup has been completed.

Other Superfund Program accomplishments in FY 2000 included 468 final site assessment decisions to determine the level of threat at waste sites, for a total of 36,152 over the life of the program. The program also conducted 357 removal response actions, including 208 time-critical responses to emergencies such as chemical fires and train derailments that are imminent and substantial threats to human health and the environment, for a total of 6,286 removal response actions over the life of the program. More than 1,200 NPL sites now have all final cleanup plans approved. Since 1982 the program has cleaned up more than 467 million cubic yards of contaminated solids and sediments and has treated more than 352 billion gallons

### EPA ANNOUNCES 750<sup>TH</sup> CONSTRUCTION COMPLETION

On September 6, 2000, EPA completed construction at the Pepe Field site in Boonton, New Jersey, marking the 750<sup>th</sup> National Priorities List Superfund site in the country to reach the construction completion milestone since the program began in 1980. Senator Frank Lautenberg, Representative Rodney Frelinghuysen and others celebrated the successful cleanup of toxic gasproducing wastes and the restoration and reopening of a community park and little league ball field.

The three-acre park, located in a suburban area of 90,000 residents, was closed after EPA named Pepe Field a federal Superfund site in 1982. The property was used from the 1920s to the 1950s as a landfill for wastes from the manufacture of edible oils and cleaning products for household and industrial use. EPA performed extensive reevaluation of the containment remedy and, in 1997, changed the long-term cleanup plan, calling for the excavation of 85,000 tons of waste and the removal to an off-site disposal facility.

September 2000

September 1999



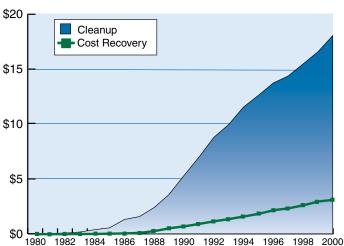
of liquid-based waste and contaminated water. The program has also supplied at least 356,000 people residing at or near Superfund sites with alternative water supplies to protect them from contaminated groundwater and surface water.

Following completion of cleanup activities and the determination that the property no longer poses a threat to human health or the environment, a site is removed from the NPL. EPA removed 19 sites from the NPL in FY 2000, for a total of 220 sites over the life of the program.

An important element of managing the Superfund Program is ensuring that questions of liability are settled quickly and that Potentially Responsible Parties (PRPs) pay their fair share of cleanup costs. In FY 2000 PRPs initiated more than 68 percent of new long-term cleanup actions at non-federal facility NPL sites, slightly less than the 70 percent annual goal. Over the past 3 years, however, private parties initiated approximately 74 percent of the new long-term cleanup actions. In FY 2000 EPA secured private party commitments for cleanup and cost recovery valued in excess of

\$1.4 billion (over \$1.3 billion for future cleanup and \$145 million for recovery of EPA's past costs). Total private party commitments for cleanup and cost recovery since the inception of the program are valued at more than \$18 billion (over \$14.9 billion for cleanup and more than \$3.1 billion for recovery of EPA's past costs), resulting in nearly \$7 in private party

### Over \$18 Billion in PRP Commitments for Cleanup and Cost Recovery Since 1980



commitments for cleanup and cost recovery for every \$1 spent on Superfund enforcement. These accomplishments of the Superfund Enforcement Program preserve the Superfund Trust Fund, which can be used for other Superfund cleanups.

To ensure that EPA's enforcement efforts are effective and at the same time fair, the Agency recognizes that some PRPs might have contributed very small amounts of waste to a site or that some parties who contributed waste to the site are now insolvent or defunct, commonly referred to as "orphan" parties. For fairness EPA is willing to enter into de minimis settlements with such PRPs or offer to compensate settling parties for the liability associated with orphan parties. In FY 2000 the Agency entered into 18 de minimis settlements with more than 1,000 parties. To date EPA has entered into more than 460 de minimis settlements to resolve the potential liability of over 22,800 parties. As an incentive for PRPs to conduct cleanup or pay for cost recovery, EPA may make "orphan share offers" to compensate for cleanup costs attributed to non-viable parties. In FY 2000 the Agency made seven offers to compensate settling parties for orphan shares, valued at over \$7.8 million, at eligible sites where EPA was negotiating for future response work, meeting its goal. EPA also made an additional 13 orphan share compensation offers, valued at over \$11.2 million, during cost-recovery negotiations. During the past 5 fiscal years (FY 1996-2000), EPA has offered more than \$194 million in orphan share compensation at 118 sites.

EPA is also responsible for recovering costs in cases where the Agency and others have already taken action to clean up sites. EPA's intention is to address all those cases approaching statute of limitations deadlines with outstanding past cleanup costs in excess of \$200,000 each year. In FY 2000 EPA addressed all but two of these statute of limitations cases prior to expiration of the statute of limitations by negotiating settlements, referring cases to the Department of Justice for litigation, or making a decision not to pursue cost recovery when no viable PRP could be located. EPA has made a decision to write off the costs associated with these two cases, and the documentation will be made final during the second quarter of FY 2001.

#### **RCRA Corrective Action**

The RCRA Corrective Action Program cleans up contamination at active industrial facilities, a universe of more than 3,500 facilities across the country. The

most serious pollution problems at RCRA-regulated facilities occur when hazardous waste releases migrate off-site, contaminating public and private drinking water supplies and endangering wetlands and other sensitive ecosystems. On-site worker exposure is also a serious concern of this program. As a means of addressing the most critical problems first, EPA and its state partners have established a list of more than 1,700 high-priority facilities that require corrective action. In addition EPA has established environmental indicators for the control of toxic groundwater releases and human exposures to measure intermediate progress at RCRA sites in environmental terms rather than administrative steps.

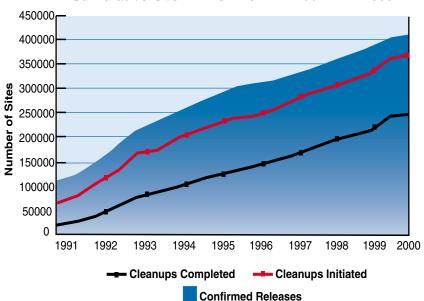
In FY 2000 EPA's Corrective Action Program documented that human exposure to contamination is under control at an additional 191 of the high-priority facilities and that migration of contaminated groundwater is under control at an additional 168 facilities. Over the life of the program, EPA and its state partners have documented that human exposures have been controlled at a total of 642 facilities and that migration of contaminated groundwater has been controlled at a total of 565 facilities. Although cumulative facility totals remain ahead of the long-term goals projected for the program in 1998, several sites that had previously been recorded as meeting the environmental indicators in 1999 had their determinations reversed because of new data provided by authorized states. These included 26 sites previously recorded for human exposures controlled and 43 sites previously recorded for groundwater releases controlled. For additional information on the Corrective Action Program accomplishments, visit the EPA web site, http://www.epa.gov/epaoswer/hazwaste/ca/ index.htm.

### **Leaking Underground Storage Tank Cleanups**

EPA's Leaking Underground Storage Tank Program promotes and implements rapid and effective responses to underground storage tank (UST) releases. In FY 2000 this program assisted states, tribes, and the regulated community in completing 20,834 cleanups, for a cumulative total of 249,760 cleanups since 1987.

Two initiatives were developed in FY 2000 to increase the effectiveness and efficiency of future cleanup work. USTfields for Abandoned Tanks was designed to promote assessment and cleanup of abandoned or closed USTs located on Brownfields

### National UST Corrective Action Activity Cumulative Over Time From FY 1991 - FY 2000



properties. The Faster Cleanups initiative was created to increase the pace of cleanups as a means of addressing the backlog of 160,000 identified releases yet to be cleaned up. Implementation of both initiatives will begin in FY 2001.

### **Brownfields**

EPA's Brownfields Program promotes the assessment, cleanup, and sustainable reuse of abandoned or underutilized industrial and commercial properties, which are present in nearly every community in the nation. Although final Brownfields data for FY 2000 are not expected until April 2001, analysis through the third quarter demonstrates that the program

### NATIONAL RECOGNITION FOR BROWNFIELDS

In FY 2000 the Brownfields Program was named one of ten recipients of the Innovations in Government Award granted by Harvard University's John F. Kennedy School of Government, the Ford Foundation, and the Council for Excellence in Government. The award honors innovative approaches to addressing important public challenges. The Brownfields Program was selected from a pool of 1,300 applicants. In addition, the program was honored in FY 2000 as a recipient of the National Partnership for Reinventing Government Hammer Award for innovations in government.

has exceeded its goals for the year. Through the third quarter of FY 2000, the Brownfields Program worked successfully in partnership with states, tribes, local communities, and other stakeholders to leverage a total of \$2.8 billion of private funds for cleanup and redevelopment, generate more than 7,400 new jobs benefitting disadvantaged communities, and fund more than 2,000 assessments of potentially contaminated sites.

### Preventing Risk Through a Safe Waste Management and Response Infrastructure

### **RCRA Permitting**

The RCRA Permitting Program establishes a "cradle-to-grave" framework that identifies a set of controls facilities should have in

that identifies a set of controls facilities should have in place to ensure the safe management of hazardous waste. During FY 2000 an additional 308 hazardous waste management facilities received permits or other approved controls to verify protection against dangerous releases to air, soil, and groundwater. Permits or other approved controls can include operating permits, verified clean closures, and postclosure permits.

The RCRA Program also successfully implemented new tools for management of environmental information to support federal and state programs in FY 2000. RCRAInfo is EPA's comprehensive information system, replacing the data recording and reporting abilities of the Resource Conservation and Recovery Information System and the Biennial Reporting System. The RCRAInfo system allows for tracking of information on the regulated universe of RCRA hazardous waste handlers, and characterization of facility status, regulated activities, and compliance histories. The system also captures detailed data on the generation of hazardous waste from large quantity generators and on waste management practices from treatment, storage, and disposal facilities. RCRAInfo is web-accessible, providing a convenient user interface for federal, state and local managers. It encourages development of in-house expertise to control cost and incorporates use of off-the-shelf software for collection of Biennial Report data.

### <u>Oil Spill Prevention, Control and Countermeasure</u> <u>Compliance</u>

To address the more than 20,000 oil spills reported to the federal government each year, EPA's Oil Spill Program works to ensure compliance with the Spill Prevention, Control and Countermeasures (SPCC) requirements. In FY 2000, 678 additional oil storage facilities came into compliance with the SPCC requirements, meaning that EPA significantly exceeded its goal of bringing 400 additional facilities into compliance.

### **Underground Storage Tank Standards Compliance**

The focus of the UST Program is to increase the number of tank owners and operators in compliance with EPA and state requirements for leak detection, as well as the 1998 federal requirements to meet new tank standards; upgrade tanks with spill, overfill, and corrosion protection; or close substandard tanks properly. EPA estimates that in FY 2000 about 86 percent of the 714,000 active tanks were in compliance with the spill, overfill, and corrosion protection requirements also known as the tank upgrade requirements, and approximately 65 percent were in compliance with leak detection requirements. In addition, 82,500 substandard USTs were properly and permanently closed in FY 2000, bringing the total number of permanently closed tanks to 1,460,000.

Two initiatives were developed in FY 2000 to support UST compliance programs: one addresses improving operational compliance with established requirements; the other assesses whether UST regulations and systems are working and determines what changes or other reforms may be necessary. Implementation of both projects will begin in FY 2001.

### Risk Management Planning

Industrial accidents and other disasters involving toxic chemicals and other hazardous substances are a constant threat to human health and the environment. In FY 2000, 917 facilities submitted Risk Management Plans (RMPs) detailing contingencies, emergency response procedures, hazardous substance inventories, and disaster response scenarios, for a total of 15,069 plans submitted. EPA granted three states authority to manage RMP programs, for a total of ten states. In response to concerns regarding public access to RMP information, the Chemical Safety Information, Site Security and Fuels Regulatory Relief Act of 1999

required assessment of both the chemical risk reduction benefits from allowing public access to off-site consequence analysis information and the increased risk of terrorist and other criminal activity from posting the information on the Internet. Based on assessments conducted by EPA and the Department of Justice, a final rule was promulgated in FY 2000 allowing public access to the off-site consequence analysis portions of the RMP in ways that minimize the likelihood of chemical accidents and the risk of terrorist or criminal activity associated with Internet posting.

### **Radioactive Waste Management**

To ensure protection from potential exposure to radioactive waste, EPA conducts oversight, including periodic inspections, to verify continued compliance with radioactive waste disposal standards. In FY 2000 EPA certified that 1,760 55-gallon drums of radioactive waste shipped by the Department of Energy to the Waste Isolation Pilot Plant were permanently disposed of safely and according to EPA standards, for a total of 3,000 drums now in storage.

### **SUMMARY OF FY 2000 PERFORMANCE**

EPA has made significant progress toward meeting the Goal 5 objectives through its FY 2000 performance for waste programs, as demonstrated by the accomplishments in cleaning up previously polluted sites through the Superfund, RCRA, UST and Brownfields programs. Most long-term commitments for waste programs are on track or ahead of schedule.

Many of the successes in FY 2000 are the culmination of long-term program reforms and initiatives. The Superfund Program underwent significant improvements in operations, beginning with a management review in 1989 which led to three rounds of administrative reforms initiated in 1993 through 1995. The reforms addressed seven major categories (cleanups, enforcement, risk assessment, public participation and environmental justice, economic redevelopment, innovative technology, and state and tribal empowerment). One example of the cleanup reforms is the ongoing initiative to update selected remedies, which encourages review of cleanup decisions at sites where new technologies, information, or other advances offer the potential for more efficient and less costly cleanups. As a result more than 300 remedies have been updated, reducing estimated future cleanup costs by more than \$1.4 billion while incurring only \$129 million in additional estimated future costs, for a projected savings of greater than 90 percent in estimated costs.

Another reform, the Superfund Redevelopment Initiative (SRI), ensures that communities have the tools and information needed to realize the benefits of reusing Superfund sites. Through FY 2000 SRI has facilitated development of more than 250 options for commercial, recreational, public service, ecological, residential, or agricultural use of land at 190 sites. Included among these sites are 13,700 acres restored for recreational and ecological purposes. EPA has integrated all of the reforms into its base program operations. Through these efforts the Superfund Program is protecting human health and the environment in ways that are faster, fairer, and more efficient.

There has also been significant progress in ensuring that active industrial facilities regulated under the RCRA Program are managing their wastes safely and preventing the migration of pollution. The RCRA Corrective Action Program, with its state partners, is implementing reforms to meet national cleanup goals faster through flexible approaches and results-oriented guidance. The reforms, focusing on 1,700 high priority facilities, have demonstrated considerable success in achieving intermediate cleanup measures at industrial sites, paving the way for eventual cleanup of contamination at these sites.

### STRENGTHENING PROGRAM INTEGRITY THROUGH IMPROVED MANAGEMENT

The Agency has made considerable progress in addressing management issues under Goal 5 identified by the General Accounting Office (GAO) and EPA's Office of the Inspector General (OIG). EPA expects to resolve remaining issues on Superfund remedial contracts, Independent Government Cost Estimates (IGCEs), Superfund 5-year reviews, and the RCRA corrective action program by the end of FY 2002. The Agency has taken multiple steps to increase capacity utilization of Superfund remedial contracts, while containing and minimizing program management costs. With respect to IGCEs, EPA established a national workgroup and is taking action to ensure continued improvement in the quality and application of these

estimates. A plan has been put in place to eliminate the backlog of 5-year reviews while maintaining the schedule of timely 5-year reviews through FY 2002. In addition the Agency is developing a number of RCRA cleanup reforms to improve and streamline the cleanup process and to better clarify how regions, states, and facilities can approach cleanups more consistently. Because of the progress EPA has made in addressing Superfund management problems, GAO removed the Superfund Program from the high risk list in the January 2001 update to the GAO High-Risk Series.

Please see Section III - Management Accomplishments and Challenges for a further discussion of the above issues.

### RESEARCH CONTRIBUTIONS

Research under Goal 5 supports efforts to reduce or control risks posed to human health and the environment by contaminated waste sites and improper waste management by facilities. Research efforts in FY 2000 were devoted to improving methods for measuring, monitoring, and characterizing complex wastes in soils and groundwater; developing approaches that enable risk assessors to accurately estimate the amount of a contaminant found in a soil matrix; and developing more cost-effective technologies for characterizing and remediating contaminated soils, sediments, and groundwater. Research focused on understanding the fate, transport, and treatment of fuel oxygenates, particularly methyl-tertiary butyl ether, to help improve source control to reduce impacts on drinking water supplies. Also in FY 2000 the Superfund Innovative Technology Evaluation Program continued to yield significant cost savings through the use of innovative remediation and characterization technologies. Additional research efforts were devoted to providing multimedia, multipathway exposure and risk methods and models for assessing the risks from waste facilities, and to improving techniques to control and prevent releases during waste management activities.

#### PROGRAM EVALUATION

The American Society for Testing and Materials (ASTM) is evaluating whether risk-based decision-making corrective actions for leaking USTs are achieving state agency management goals for the UST Program. The study has reviewed five state programs employing

risk-based decision-making and will evaluate the impact on overall performance. A series of bulletins, published by ASTM beginning in March 1999, have been used to report on progress and summarize findings. The second bulletin, published in March 2000, addressed development of performance measures for risk-based decision-making programs. Information in the second bulletin will be used to expand and update a risk-based decision-making database that is used by state programs.

As part of the RCRA cleanup reforms, EPA has evaluated current practices and produced draft guidance, Results-Based Approaches to Corrective Action (available through the Internet at http://www.epa.gov/ epaoswer/hazwaste/ca/resource/guidance/ gen\_ca/results.htm), promoting incorporation of results-based cleanup approaches into delegated RCRA program management. The comment period closed in November 2000, and EPA anticipates publishing final guidance in 2001. In addition two audits of the RCRA Corrective Action Program were conducted in FY 2000 by EPA's OIG and GAO: RCRA Corrective Action Focuses on Interim Priorities - Better Integration with Final Goals Needed (EPA OIG, 2000-P-0028, September 2000, http:// www.epa.gov/oigearth/audit/list900/ rcraaction.pdf), which assessed the progress of the RCRA corrective action program and recommended development of additional performance goals for the restoration of waste sites at active facilities, and EPA Has Removed Some Barriers to Cleanup (GAO/RCED-00-224, August 2000, http://www.gao.gov), which assessed several EPA actions to revise RCRA regulatory requirements to remove cleanup barriers.

### ASSESSMENT OF IMPACTS OF FY 2000 PERFORMANCE ON FY 2001 ANNUAL PERFORMANCE PLAN

Many of the FY 2000 performance goals and measures will remain priorities for emergency response and waste management programs through FY 2001. Based on better-than-anticipated performance in FYs 1999 and 2000, the annual performance targets for Brownfields economic indicators and compliance with the Oil Program's Spill Prevention, Control and Countermeasure requirements have been raised. Also EPA has added performance measures related to tribal accomplishments in its FY 2001 annual plan, focusing attention on developing and maintaining the waste

program for tribes. These measures cover operations within the Superfund, chemical accident prevention, leaking underground storage tank, and hazardous and municipal solid waste management programs.

### TABLES OF RESULTS

The following tables of results include performance results for the 12 FY 2000 Congressional Annual Performance Goals (APGs) that appear in Goal 5. In cases where the FY 2000 APG is associated with an FY 1999 APG, the table includes the FY 1999 APG below the FY 2000 APG for ease in comparing performance. Where applicable, the tables note cases where FY 2000 APGs are supported by state National Environmental Performance Partnership System (NEPPS) Core Performance Measures (CPMs). As described in more detail in Section I of the report ("Overview and Analysis"), states use CPMs to evaluate their progress toward mutual program goals. Additionally EPA is providing information on FY 1999 APGs for which data were not available when the FY 1999 report was published.

### FY 2000 Annual Report Annual Performance Goals and Measures - Table of Results

Summary FY 2000 Performance					
7	Goals Met	5	Goals Not Met	0	Other

### GOAL 5 - BETTER WASTE MANAGEMENT, RESTORATION OF CONTAMINATED WASTE SITES, AND EMERGENCY RESPONSE

### FY 2000 ANNUAL PERFORMANCE GOALS AND MEASURES

FY 2	000	FY 1999
Planned	Actual	Actual

	A AND ITS PARTNERS WILL REDUCE OR CONTROL THE RISKS TO H ENT AT OVER 375,000 CONTAMINATED SUPERFUND, RCRA, UST AN			
FY 2000 APG 30:	EPA and its partners will complete 85 Superfund cleanups (construction completions) to achieve the overall goal of 900 construction completions by the end of 2002.	85	87	
(FY 1999)	EPA and its partners will maintain the pace of cleanups by completing construction at 85 additional Superfund sites (for a cumulative total of 670 construction completions with a target of 925 construction completions in 2002).			85
Explanation:	Goal met. EPA exceeded its target, attaining a total of 87 construction completions, for a cumulative total of 757 construction completions over the life of the program.			
Data Source:	The Comprehensive Environmental Response and Compensation Liability Information System (CERCLIS) tracks, stores, and reports Superfund/Oil site information, including cleanup, cost recovery, and compliance status. The system also records regional accomplishments on Brownfields assessments.			
Data Quality:	Regional EPA staff are responsible for reviewing, verifying, and validating site data for CERCLIS. Also, several administrative controls are in place to assure data accuracy. The Office of the Inspector General (OIG) reviews the end-of-year Superfund reports to verify numbers for all performance measures. A General Accounting Office (GAO) audit done to assess the validity of data in CERCLIS estimated that the cleanup status of National Priority List sites reported in CERCLIS is accurate for 95% of the sites.			
FY 2000 APG 31:	Maximize all aspects of potentially responsible party (PRP) participation, which includes maintaining PRP work at 70% of the new remedial construction starts at non-Federal Facility Superfund sites, and emphasizing fairness in the settlement process.	70%	68%	
(FY 1999)	Obtain PRP commitments for 70% of the work conducted at new construction starts at non-federal facility sites on the National Priority List (NPL) and emphasize fairness in the settlement process.			80%
Performance Mea	sures			
- Orphan share of	offers at eligible work settlement negotiations.	100%	100%	100%
- De minimis set	tlements.	20	18	37
Explanation:	Goal not met. Although the goal was not met, the long-term average is near the 70% target, and the percentage of remedial construction starts initiated by responsible parties has averaged 74% over the past three years. EPA determines the percentage of remedial construction starts conducted by responsible parties at non-federal facility NPL sites. The annual percentage depends on several factors, including the number of sites ready to begin remedial action, whether work at those sites is financed by the responsible party or Superfund, and the funding available for remedial action starts. As a result, the annual percentage may vary. In FY 2000 responsible parties committed to funding remedial action at 64 of 94 sites that were ready for remedial action (68%). To ensure fairness in the settlement process, EPA successfully made orphan share offers at 100% of work settlement			

EV 0000	ANNUAL DEDECOMANCE COAL CAND MEASURES	FY 2000		FY 199
FY 2000 A	ANNUAL PERFORMANCE GOALS AND MEASURES	Planned	Actual	Actua
	Equity Act, which specifically exempted from Superfund liability generators of certain recyclable materials, including lead-acid batteries. As a result the <i>de minimis</i> parties at the two lead-acid battery sites were no longer liable under Superfund, and EPA did not have to enter into settlements at these sites.			
Data Source:	Same as FY 2000 APG 30.			
Data Quality:	Same as FY 2000 APG 30.			
FY 2000 APG 32:	Ensure trust fund stewardship by recovering costs from PRPs when EPA expends trust fund monies. Address cost recovery at all NPL and non-NPL sites with a statute of limitations (SOL) on total past costs equal to or greater than \$200,000.	100%	98.5%	
(FY 1999)	Ensure trust fund stewardship by recovering costs from PRPs when EPA expends trust fund monies. Address cost recovery at all NPL and non-NPL sites with a statute of limitations on total past costs equal to or greater than \$200,000.			99%
Explanation:	Goal not met. Although the goal was not met, there was no loss in dollars recovered. Cost recovery was addressed at 253 (or 98.5%) of NPL and non-NPL sites with total past costs greater than or equal to \$200,000. EPA plans to write off costs associated with the two other SOL cases (1.5%), but decision documents were not processed in a timely manner.			
Data Source:	Same as FY 2000 APG 30.			
Data Quality:	Same as FY 2000 APG 30.			
FY 2000 APG 33:	172 (for a cumulative total of 649 or 38%) of high priority Resource Conservation and Recovery Act (RCRA) facilities will have human exposures controlled and 172 (for a cumulative total of 612 or 36%) of high priority RCRA facilities will have ground-water releases controlled.  Corresponds with two FY 2000 NEPPS Core Perfomance Measures (CPMs).	172 172	191 168	162
(FY 1999)	83 (for a cumulative total of 238 or 14%) of high priority RCRA facilities will have human exposure controlled and 45 (for a cumulative total of 119 or 7%) will have ground-water releases controlled.			188
Explanation:	Goal met. An additional 191 high priority RCRA facilities have human exposures controlled (for a cumulative total of 642 out of 1,714 total facilities, or 37%). An additional 168 high priority RCRA facilities have groundwater releases controlled (for a cumulative total of 565 out of 1,714 total facilities, or 33%). While the cumulative totals for human exposures and groundwater releases are slightly less than the FY 2000 targets, cumulative totals still exceed 1998 projections for achieving long-term RCRA corrective action goals. Variances in cumulative totals stem from changes in facility counts following the provision of new data by authorized states, resulting in a change of designation for environmental indicators being met at 26 sites for human exposures controlled and 43 sites for groundwater releases controlled. There were no changes in EPA procedures as a result of the reviews.			
Data Source:	EPA regions and authorized states enter data on a rolling basis into the Resource Conservation and Recovery Information System (RCRAInfo), which contains information on entities (generally referred to as "handlers") that are engaged in hazardous waste generally and management activities			
	regulated under the hazardous waste part of RCRA.			

EV 0000 :	NAME OF THE PROPERTY OF THE PR	FY 2	2000	FY 1999	
FY 2000 A	NNUAL PERFORMANCE GOALS AND MEASURES	Planned	Actual	Actual	
FY 2000 APG 34:	Complete 21,000 Leaking Underground Storage Tank (LUST) Cleanups for a cumulative total of 250,000 cleanups since 1987. ◆ Corresponds with FY 2000 NEPPS CPM.	21,000	20,834		
(FY 1999)	Complete 22,000 LUST cleanups.			25,678	
Explanation:	Goal met. EPA met the goal by providing assistance to its state partners in completing approximately 21,000 cleanups, for a cumulative total of about 250,000 since 1987. Projections for outyear accomplishments demonstrate that the FY 2005 goal of 332,000 cleanups completed, and the overall goal of 370,000 cleanups completed or initiated, will be achieved by or before FY 2005.				
Data Source:	Designated state agencies submit semiannual progress reports to regional EPA offices.				
Data Quality:	Regional EPA offices verify reports from state agencies and then forward to Headquarters. Headquarters staff examine the data and resolve any discrepancies with the regional offices. There is no centralized database on underground storage tank (UST) sites. EPA Headquarters has provided guidance on standard definitions for data reported.				
FY 2000 APG 35:	EPA will provide additional site assessment funding to 50 communities, resulting in a cumulative total of 1,900 sites assessed, the generation of 4,900 jobs, and the leveraging of \$1.7 billion in cleanup and redevelopment funds.	1,900 4,900 \$1.7 B	2,024 7,446 \$2.8 B (at end		
(FY 1999)	EPA will fund Brownfields site assessments in 100 more communities, thus reaching 300 communities by the end of 1999.		of third quarter 2000)	80 (307 cumulative	
Explanation:	Goal met. Although fourth quarter data are not available until April 2001, EPA exceeded the goal as indicated by third quarter data that show cumulative totals of 2,024 site assessments, generation of 7,446 jobs, and leveraging of \$2.8 billion in cleanup and redevelopment funds.		-		
Data Source:	Data are entered on a rolling basis into the Brownfields Management System (BMS). BMS is used to evaluate environmental and economically related results, such as jobs generated and acres assessed and remediated. Data are gathered from Brownfields pilots' quarterly reports from grant recipients and from the regions.				
Data Quality:	EPA prepared and issued guidance to Brownfields grant recipients on evaluating and reporting progress on performance measures. Regional staff responsible for setting up the grants conduct data quality reviews.				
FY 2000 APG 36:	Ensure compliance with Federal facility statutes and Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Agreements and ensure completion of current NPL CERCLA Inter-agency Agreements (IAGs).			No FY 1999 APG	
Performance Meas	sures				
- Complete NPL		6 4	2		
- Begin CERCLA		4	'		
Explanation:	Goal not met. Issues raised by the responsible federal parties resulted in delays in completing four of the six targeted NPL IAGs. EPA is continuing its efforts to compel the federal parties to complete these four remaining IAGs. Since the beginning of FY 2001, two outstanding NPL IAGs have been completed, and negotiations are scheduled to address the two remaining outstanding IAGs. The Agency also began negotiating the four planned CERCLA IAGs during the year, but only one of these was properly reflected in the database (as indicated in the "actual" column).				
Data Source:	Same as FY 2000 APG 30.				
	Same as FY 2000 APG 30.	1		1	

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EV 0000 A	ANNUAL DEDECOMANCE COAL CAND MEACURES	FY 2000		Actual Actual  No FY 1999 APG  0 1/30/01 12/31/00
FY 2000 A	ANNUAL PERFORMANCE GOALS AND MEASURES	Planned	Actual	Actual
FY 2000 APG 37:	Enhance scientifically defensible decisions for site cleanup by providing targeted research and technical support.			FY 1999
Performance Mea	sures			APG
- Deliver Superfu	ral attenuation case studies of methyl-tertiary butyl ether (MTBE).  und Innovative Technology Evaluation (SITE) report to Congress.  esearch on methods, models and factors relating to risk evaluation of dermal ure.	1 9/30/00 9/30/00	0 1/30/01 12/31/00	
- Review 20 soil	contaminants and develop screening levels.	9/30/00	9/30/00	
Explanation:	Goal not met. EPA made progress toward this goal by documenting cost savings and clean up decisions based on research through the SITE Report and other technical support programs, although finalization of several reports was delayed. The summary report for MTBE case studies was delayed until April 2001 because the original scope was expanded to include more than four sites, thus strengthening the data supporting the report. The SITE report was delivered to OMB in fiscal year 2000, but the delivery date to Congress was delayed due to time required for OMB approval. The report on the dermal exposure route was delayed until December 2000 due to time required for peer review.			
Data Source:	Agency generated material.			
Data Quality:	As required by the Agency-wide formal peer review policy issued in 1993, and reaffirmed in 1994 and 1998, all major scientific and technical work products used in Agency decision making are independently peer reviewed before their use. EPA has implemented a rigorous process of peer review for both its in-house and extramural research programs. Peer review panels include scientists and engineers from academia, industry, and other federal agencies.			

BY 2005, OVER 282,000 FACILITIES WILL BE MANAGED ACCORDING TO THE PRACTICES THAT PREVENT RELEASES TO THE ENVIRONMENT, AND EPA AND ITS PARTNERS WILL HAVE THE CAPABILITIES TO SUCCESSFULLY RESPOND TO ALL KNOWN EMERGENCIES TO REDUCE THE RISK TO HUMAN HEALTH AND THE ENVIRONMENT.

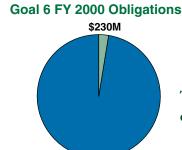
FY 2000 APG 38:	106 more hazardous waste management facilities will have approved controls in place to prevent dangerous releases to air, soil, and groundwater, for an approximate total of 67% of 2,900 facilities.	106	308	
(FY 1999)	122 hazardous waste management facilities (for a cumulative total of 61% of 3,380 RCRA facilities) will have permits or other controls in place.			149
Explanation:	FY 2000: Goal met. EPA exceeded its goal by documenting approved controls for 308 additional RCRA hazardous waste management facilities, for a cumulative total of 1,802 facilities. The Agency was able to exceed this goal due to establishment of definitions for non-permitting approved controls at hazardous waste management facilities, accounting for a high number of facilities that needed minor administrative work, the completion of an extensive data cleanup effort, and improved relationships with state partners. The percentage of cumulative accomplishments against the baseline has been adjusted to reflect ongoing improvements to RCRA data systems. For FY 2001 and beyond, the facility baseline has been adjusted to 2,750.			
	FY 1999: Goal met. Based on information received in FY 2000, EPA exceeded its FY 1999 target. 149 RCRA hazardous waste management facilities were determined to have permits or other controls in place.			
Data Source:	Same as FY 2000 APG 33.			
Data Quality:	Same as FY 2000 APG 33.			

EV 0000 A	NINHAL DEDECOMANCE COALS AND MEACURES	FY 2000		FY 1999	
F Y 2000 A	NNUAL PERFORMANCE GOALS AND MEASURES	Planned	Actual	Actua	
FY 2000 APG 39:	400 additional facilities will be in compliance with the Spill Prevention, Control and Countermeasure (SPCC) provisions of the oil pollution regulations (for a cumulative total of more than 1,500 facilities since 1997).	400	678		
(FY 1999)	190 additional facilities will be in compliance with the SPCC provisions of the oil pollution regulations (for a cumulative total of 490 additional facilities since 1997).			774	
Explanation:	Goal met. EPA has exceeded its goal due to implementation of an expedited inspection and compliance monitoring program. FY 2001 targets have been adjusted to account for this new program.				
Data Source:	Same as FY 2000 APG 30.				
Data Quality:	Same as FY 2000 APG 30.				
FY 2000 APG 40:	Enhance scientifically defensible decisions for active management of wastes, including combustion, by providing targeted research and technical support.				
(FY 1999)	Complete prototype model for assessing cumulative exposure-risk assessment integrating the environmental impact of multiple chemicals through multiple media and pathways.			9/30/9	
Performance Mea	sures				
• •	onal toxicity values for 10 to 20 waste constituents.	9/30/00	9/30/00		
•	irnal article on factors that control mercury speciation in incinerators.	1	1		
Explanation:	Goal met. EPA met the goal of providing targeted research and technical support for the active management of wastes by preparing nine provisional toxicity values from 38 feasibility assessments on 25 waste constituents. The journal article on factors that control mercury speciation in incinerators was published in FY 2000.				
Data Source:	Same as FY 2000 APG 37.				
Data Quality:	Same as FY 2000 APG 37.				
FY 2000 APG 41:	90% of USTs will be in compliance with EPA/state December 22, 1998 requirements to upgrade, close or replace substandard tanks.  Corresponds with FY 2000 NEPPS CPM.	90%	86%	No FY 199 APG	
Explanation:	Goal not met. 86% of USTs demonstrated compliance with the 1998 requirements to upgrade, close, or replace substandard tanks. The original target was based on equipment changes to UST systems. However, EPA has changed the focus of compliance from simply having the required equipment to properly operating that equipment as well. As a result a number of states have reported compliance rates based on operational compliance (rather than "equipped to comply") which led to a lower overall compliance figure. Improving reporting while maintaining flexibility under the program is a near-term goal of the Agency.				
Data Source:	Same as FY 2000 APG 34.				
Data Quality:	Same as FY 2000 APG 34.				

# Goal 5: Better Waste Management

(ACTUAL PI	ERFORMANCE DATA AVAILABLE IN FY 2000 AND BEYOND OR WITH PERF BEYOND FY 2000)	ORMANCE TARGE	ETS
	·	Planned	Actual
FY 1999 APG:	Demonstrate and verify the performance of 18 innovative technologies by 2001, emphasizing remediation and characterization of groundwater and soils.	11	18
Explanation:	Goal met. As of the end of FY 2000, 25 innovative technologies have been demonstrated and verified (seven in FY 1999 and 18 in FY 2000).		
Data Source:	Same as FY 2000 APG 37.		
Data Quality:	Same as FY 2000 APG 37.		

FY 1999 ANNUAL PERFORMANCE GOALS WITHOUT CORRESPONDING FY 2000 GOALS



Note: EPA FY 2000 Obligations were \$8,974 million

### GOAL 6: REDUCTION OF GLOBAL AND CROSS-BORDER ENVIRONMENTAL RISKS

The United States will lead other nations in successful multilateral efforts to reduce significant risks to human health and ecosystems from climate change, stratospheric ozone depletion, and other hazards of international concern.

#### **OVERVIEW**

Environmental hazards, like ecosystems, are not limited by national borders. Transboundary circulation of toxic chemicals; marine pollution; depletion of the stratospheric ozone layer; climate change; safety issues posed by the international trade in chemicals, pesticides, and biotechnology products; and similar global issues all pose significant risks to the United States. Unilateral domestic actions and investments cannot adequately protect the well-being of people or the environment from such risks. Therefore, collaboration with other countries and tribal nations is essential in protecting not only the domestic environment but also the global environment. Agency programs address this need by fostering multilateral cooperation on environmental and trade issues and enhancing foreign countries' technical capacity for addressing environmental risks globally.

### **FY 2000 PERFORMANCE**

### **Ensuring a Healthy and Sustainable Environment Along the U.S.-Mexico Border**

The U.S.-Mexico Border XXI Program continues to make progress in addressing the region's serious environmental problems. For example, air emissions inventories and monitoring networks, which serve as the basis for local air quality management plans, are in place in the three largest border sister cities (which have a total U.S.-Mexican population of more than five million). There have been dramatic improvements in the availability of water and sewer services in the border area, primarily because of partnerships with the Border Environment Cooperation Commission (BECC) and the North American Development Bank, including the EPA funded Border Environment Infrastructure Fund. Thirty BECC-certified projects are in various stages of

construction or have been built in the border area, and they ultimately will serve about seven million border residents. Six sister-city pairs now have contingency plans to respond to chemical emergencies, and systems are in place to allow cross-border responses to hazardous substance incidents. The two countries have established a mechanism to provide information to the public about new and existing treatment, storage, and disposal facilities for hazardous and radioactive wastes. In addition a system to track hazardous waste returned to the United States for disposal will ensure safe disposal and to serve as an enforcement tool.

### Restoring and Maintaining the Great Lakes Basin Ecosystem

The Great Lakes Basin contains one-fifth of all the world's surface fresh water (six quadrillion gallons of water, enough to cover the entire conterminous United States to a depth of about ten feet). Environmental data on the health of the basin are indicating some improvement, yet some areas show no sign of recovery. EPA's ability to assess environmental progress and challenges in the Great Lakes Basin was further enhanced in FY 2000 with the release of 31 reports on proposed comprehensive, basin-wide indicators (http://www.on.ec.gc.ca/solec/indicators2000-e.html).

In partnership with states, EPA continues to address challenges in the Great Lakes. In FY 2000 the Agency accelerated the development of Lakewide Management Plans, issued a plan for each lake in April 2000, and approved six state programs tailored to protect the water quality of the Great Lakes. The Great Lakes Program reported the following developments in FY 2000:

 There was a small increase in reported Great Lakes beach closures in 1999 as a result of beach managers' adopting closing criteria more protective of human health and conducting more frequent monitoring.

- Concentrations of polychlorinated biphenyls (PCBs) and pesticides in the air continue to decline; however, concentrations of polynuclear aromatic hydrocarbons in the air (from combustion of fossil fuels and other organic substances) have remained relatively constant.
- Fish advisories continue for all of the Great Lakes as a result of toxic contaminants from the air and sediments; for example, PCB concentrations in Lake Michigan coho salmon are ten times higher than the health protection value.
- Oxygen depletion in the Central Basin of Lake Erie indicates potential for increasing severity of problems such as excess phosphorus and difficulty sustaining bottom-dwelling fish and other biota.
- New invasive species are expected to have ecosystem and economic impacts; for example, Daphnia lumboltzi, a small crustacean, was recently identified as the 160th aquatic invasive species in the Great Lakes.

In FY 2000 EPA also continued to address contaminated sediments, a major source of fish and wildlife contamination in the Great Lakes. Contaminated sediments have contributed to impairments to more than 2,000 miles (20 percent) of shoreline and to the fish consumption advisories in place throughout the Great Lakes. More than 1,600,000 cubic yards of contaminated sediments have been remediated during the past 4 years (http://www.epa.gov/glnpo/sediments.html).

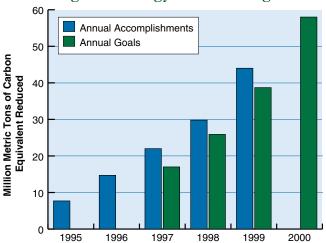
### **Protecting The Northwestern Border**

The United States and its multilateral partners ended the first phase of a project to help Russia manage PCBs in an environmentally sound manner and thereby comply with pertinent international agreements. Although estimated PCB stocks and releases are considerable, preliminary reviews indicate that the quantities might be underestimated. Once high-priority sources have been identified and feasibility studies completed, Russia will take corrective measures that ultimately will reduce the environmental releases of PCBs and long-range transport from Russia. In turn this reduction will lower the biouptake of PCBs not only in Russia but also in Alaska and other receiving areas.

### **Addressing Global Climate Change**

Through EPA's climate program, the Agency is delivering real greenhouse gas emissions reductions by identifying and addressing opportunities to reduce energy waste and to prevent emissions of potent greenhouse gases associated with the public and private sectors, including consumers. For 2000 and beyond EPA's objective is to reduce U.S. greenhouse gas emissions to levels consistent with international commitments under the Framework Convention on Climate Change, building on initial efforts under the Climate Change Action Plan. For FY 2000 EPA is on track to meet its greenhouse gas emissions reduction target of 58 million metric tons of carbon equivalent (MMTCE). Data will be available in spring 2001.

### Greenhouse Gas Reductions from EPA Climate Change Technology Initiative Programs



The core of EPA's climate change efforts is government-industry partnership programs designed to overcome the barriers that limit investments by consumers, businesses, and other organizations in cleaner or more efficient technologies. Energy-efficient technologies provide a sizable opportunity for limiting emissions of greenhouse gases while simultaneously improving local air quality and saving money for both businesses and consumers. EPA's climate change program has shown results by meeting emission-reduction goals and demonstrating cost-effectiveness. Based on actions taken by partners in the voluntary programs, EPA reports the following results through 1999:

 Annual greenhouse gas emission reductions equivalent to eliminating the emissions from about 18 million cars.

- Annual reductions in emissions of nitrogen oxide (NO<sub>x</sub>) totaling over 100,000 tons, equivalent to the annual emissions from 70 power plants.
- Continued emission reductions from actions already taken by program partners of more than 20 MMTCE per year through 2010.

Cars, trucks, aircraft, and other components of the nation's transportation system emit about one-third of total U.S. greenhouse gas emissions. Transportation policies, plans, and choices have an immense effect on greenhouse gas emissions, particularly on carbon production. Although technology and market-oriented measures will make a major contribution toward reducing emissions, efforts to reduce vehicle miles traveled (VMT) are also critical for achieving EPA's greenhouse gas emission reduction goals. To this end in FY 2000 EPA actively supported voluntary regional, state, and community efforts that encourage additional travel choices and alternatives to single-occupancy vehicle driving. An example of these efforts is the national Commuter Choice program that was launched in 2000 to achieve VMT reductions. Commuter Choice programs encourage employers to provide their employees transportation options in commuting to and from work, such as free or reduced cost passes for public transportation, opportunities to carpool, telecommuting options, and incentives to bike or walk.

In addition EPA joined six other federal agencies, along with Ford, General Motors, and DaimlerChrysler, in the Partnership for a New Generation of Vehicles (PNGV), an ongoing program to develop a new generation of safe, attractive, affordable vehicles with ultra-low emissions and high fuel efficiency. In FY 2000, as part of the PNGV program, EPA demonstrated 72 mpg (gasoline equivalent) on a mid-size research chassis using a state-of-the-art diesel engine and an EPA-invented, patented, and developed hybrid drivetrain.

### **Restoring the Ozone Layer**

The stratospheric ozone layer protects life on earth from harmful ultraviolet (UV) radiation. Scientific evidence amassed over the past 25 years indicates that the use of chlorofluorocarbons (CFCs) and other halogenated chemicals has resulted in the destruction of stratospheric ozone. In FY 2000 EPA furthered the nation's commitment to assisting in the restoration of the ozone layer by tracking, through a marketable permit system, industry compliance with regulatory restrictions

on the consumption of ozone-depleting substances. Although continued U.S. commitment to these restrictions is essential to halting the destruction of ozone in the stratosphere, the participation of developing countries is also key to ensuring the timely restoration of the ozone layer. U.S. leadership in international negotiations during FY 2000 led to an agreement with China, the largest consumer of ozone-depleting substances among developing countries. China will now reduce its use of ozone-depleting solvents at a faster rate than that to which it originally agreed.

Scientists anticipate that by the end of this decade the stratospheric ozone hole will stop growing. However, because ozone-depleting substances have a long life and were emitted for many years before EPA's restrictions and the international agreement, the public is faced with potentially unhealthy levels of UV radiation. Recognizing this, during FY 1999 EPA launched the SunWise School Program to promote sun safety practices. The program's goal is to protect children from skin cancer, cataracts, and other longterm UV-related health effects. SunWise now reaches more than 10,000 children between the ages of five and 15 in 42 states across the nation, and the list of participating schools is growing. Pre- and post-program surveys of participating students show that the program has already begun to increase the level of knowledge among children about ways to reduce their exposure to harmful UV radiation. More importantly the students are demonstrating their knowledge. In FY 2000 EPA set a target that 60 percent of children in SunWise schools would be very likely to use Healthy People 2000 "safe sun" practices. EPA has found, however, that an "all of the time" standard is more likely to be associated with greater risk reduction and less disease. Using this revised metric, in FY 2000 the proportion of SunWise children who used sunscreen all of the time was 26 percent; hats, 18 percent; long-sleeve shirts, 23 percent; and sunglasses, 25 percent. The action steps recommended by SunWise are provided at http:// www.epa.gov/sunwise/actionsteps.html.



### **Reducing Circulating Chemicals**

EPA made progress in FY 2000 toward reducing the risks to U.S. human health and ecosystems from selected toxics that circulate in the environment at global and regional scales. Under the auspices of the North American Commission for Environmental Cooperation, the United States, Canada, and Mexico prepared a second-phase North American Regional Action Plan (NARAP) for mercury, which calls for ending specific mercury uses where there is an unreasonable or otherwise unmanageable risk of release to the environment or risk to human health. However, because of the countries' differences in levels of priority and effort devoted to mercury risk reduction, economic conditions, and technological and infrastructure capabilities, they did not establish time lines for completing the activities set forth in the nonbinding mercury NARAP.

EPA expanded its mercury monitoring network in FY 2000 to collect additional data on the long-range transport and transformation of mercury. Through this monitoring, EPA and its partners are contributing the data required for modeling through the placement of new air quality monitors in coastal Alaska. These new monitors will determine the relative apportionment between domestic and international sources of mercury that concentrates in fish (the primary exposure route for humans). Having such apportionments will permit EPA to focus domestic emission control efforts and international risk management initiatives, all of which are intended to minimize mercury releases to the environment and thus decrease exposures to mercury. This effort supports domestic obligations under the Clean Air Act, as well as those made in the mercury NARAP and other agreements.

The negotiations on a legally binding global convention on persistent organic pollutants (POPs) such as dichlorodiphenyltrichloroethane (DDT) were successfully concluded in December 2000. It is not yet clear, however, whether international financial institutions, the United States, and other developed countries will be able to offer levels of capacity-building support sufficient to prompt key developing countries to sign and comply with the global POPs convention. Finally, EPA and other member countries of the Organization for Economic Cooperation and Development completed work on five harmonized test guidelines, a protocol of consistent international testing

guidelines based on a combination of standard U.S. and European chemical toxicity testing procedures.

### Increasing Harmonization and Environmental Capacity

In establishing a greater connection between the environment and trade, EPA, working with other federal agencies, contributed to the development and implementation of Executive Order (E.O.) 13141, Environmental Review of Trade Agreements. In addition to EPA's analysis of the potential regulatory effects of trade agreements, under the E.O. the Agency will contribute to the "core analysis" by estimating changes in various categories of pollution in the United States that could be expected from the trade agreement. When fully implemented in 2001, E.O. 13141 will represent one of the most significant policy contributions to the environment and trade debate because comprehensive trade agreements potentially touch every natural resource through the primary and secondary effects of tariff changes, removal of nontariff trade barriers, and rule changes.

High-quality environmental information plays a vital role in building capacity to address global environmental problems. The Agency's international environmental information efforts have expanded rapidly during the past several years. In FY 2000 EPA completed its first International Environmental Information Inventory and used the resulting data to develop the Agency-wide Strategic Plan for International Environmental Information. This plan will help EPA track new international information programs, ensure that programs do not duplicate efforts, and target scarce resources as effectively as possible. Toolkits were also developed and designed to help other countries enhance their environmental libraries and to locate, through the Internet, environmental information from around the world.

### **SUMMARY OF FY 2000 PERFORMANCE**

EPA has long been recognized as the leading source of environmental regulatory and management expertise worldwide. The direct benefit to U.S. citizens and their environment resulting from this involvement underscores the importance of ensuring an active and continuing international presence. EPA has made progress in its efforts to advance protection of the

global commons. There has been progress in protecting the ozone layer, and progress is being made to reduce the increasing rate of greenhouse gas emissions. Treaties and binding conventions such as the Global POPs are under way and are advancing the ideal of sustainable environmental growth. People along the U.S. border in various municipalities have access to water and wastewater treatment for the first time. Continued progress will rely greatly on the Agency's ability to achieve agreement on key global negotiations and on its ability to sustain support for this work.

### RESEARCH CONTRIBUTIONS

In FY 2000 EPA research and assessment activities examined the potential consequences of climate change for human health and ecosystems in the United States. EPA assessed the possibility of changes in disease patterns due to changing climate; the impact of heat stress on populations, especially senior citizens and children; the air pollution-related health effects of climate change; and the socioeconomic consequences of extreme weather events. Researchers also analyzed the impact of climate change and variability on the ability of ecosystems to provide the services that many people rely on but often take for granted, such as water filtration and air purification. In an effort to understand how climate change might affect life in the United States, EPA sponsored the Great Lakes, Mid-Atlantic, and Gulf Coast Regional Assessments, as well as the Health Sector Assessment, as part of the U.S. Global Change Research Program's First National Assessment of the Potential Consequences of Climate Variability and Change for the United States. The assessments provide stakeholders and policy makers with information on the potential risks and opportunities presented by climate change and offer options for adapting to the changes.

### STRENGTHENING PROGRAM INTEGRITY THROUGH IMPROVED MANAGEMENT

EPA's Office of the Inspector General (OIG) evaluated the Great Lakes Program at the Agency's request to provide advice and assistance on how to improve the Lakewide Management Plan (LaMP) and Remedial Action Plan processes and develop and implement effective national strategies and agreements. The Agency undertook several actions consistent with

the OIG's recommendations, including accelerating the development of LaMP documents that were published for the Great Lakes in FY 2000; reinstituting the Great Lakes U.S. Policy Committee, including states, tribes, and other federal agencies; and developing a tracking system to address the issues. Efforts will continue toward improving the Great Lakes Strategy and clearly identifying the responsibilities of EPA program offices and regions, states, and Canada to fully support the restoration and maintenance of the chemical, physical, and biological integrity of the Great Lakes.

Please see Section III - Management Accomplishments and Challenges for a further discussion of the above issues.

### **PROGRAM EVALUATION**

EPA's Great Lakes Program regularly consults with federal, state, and tribal governmental agencies responsible for setting strategic directions for Great Lakes environmental protection. In FY 2000 EPA responded to FY 1999 consultations and evaluations by reinstituting the Great Lakes U.S. Policy Committee. The consultations and evaluations were conducted as a series of meetings and did not result in a published report.

Pursuant to a congressional request, the General Accounting Office (GAO) reviewed the partnership between the federal government, including EPA, and three domestic automobile manufacturers (the Partnership for a New Generation of Vehicles (PNGV)), focusing on the following aspects: (1) the progress made to date toward achieving the partnership goals; (2) the historical federal funding levels; (3) the technologies being developed under PNGV; and (4) a comparison of the overall research and development activities of the automobile manufacturer participants with research sponsored by the partnership.

In its letter "Cooperative Research: Results of U.S.-Industry Partnership to Develop a New Generation of Vehicles" (Letter, March 30, 2000, GAO/RCED-00-81, http://www.gao.gov), GAO noted, "While progress has been made toward the goals of the PNGV partnership, technological and affordability obstacles still need to be overcome. It is not yet possible to assess if the partnership is improving U.S. competitiveness in manufacturing, its first goal. The partnership is making progress towards its second goal of implementing

commercially viable innovations in conventional vehicles. In addition the partnership has made progress toward its third goal, releasing concept cars by March 2000 that manufacturers stated demonstrate the ability to achieve nearly 80 miles per gallon. However, the manufacturers and National Research Council stated that significant technological and affordability obstacles remain."

### ASSESSMENT OF IMPACTS OF FY 2000 PERFORMANCE ON FY 2001 ANNUAL PERFORMANCE PLAN

Development of EPA's FY 2001 Annual Performance Goals (APGs) and measures under Goal 6 was guided by FY 2000 performance results. In some instances data indicated no change in course. Most programs are on track toward meeting the strategic goal. In other cases, however, the Agency made dramatic changes. For example the Agency's decisions to pursue enhanced involvement in trade negotiations and liberalization agreements in FY 2000 have focused greater attention on analyzing and participating in trade agreements affecting U.S. environmental regulations as EPA implements the E.O. on environmental review. In addition, the following programs reassessed their direction in FY 2001 based on FY 2000 performance:

- Great Lakes Basin ecosystem. The depletion of oxygen in the Central Basin of Lake Erie indicates potential problems, which will be explored further in FY 2001. Identification of the 160th invasive species has reinforced the urgency of EPA and its partners making progress on technology to prevent the further introduction and spread of invasive species. Projects are exploring the use of filtration, as well as the use of UV light, for secondary treatment of ballast water, and are looking at the impacts of "No Ballast on Board" vessels. The FY 2001 performance measures for Great Lakes Ecosystem Assessment have been revised to measure ecological trends, a significant improvement over FY 2000 measurement of outputs.
- Ozone depletion. EPA's successful performance in FY 2000 is reflected in its FY 2001 ozone layer restoration goals. The goals will include implementing the next regulatory step in the phaseout of methyl bromide, implementing a market-based allowance allocation system for

- hydrochlorofluorocarbon (HCFC) production and importation, increasing the number of developing countries helped by U.S. assistance through the Multilateral Fund, and improving childlren's knowledge of the importance of proper sun protection by expanding the SunWise School Program to include 20 percent more children across the country.
- Circulating chemicals. EPA's performance in FY 2000
  is reflected in the Agency's FY 2001 goals for
  increasing the number of mercury transport
  monitoring stations operating in North America
  and elsewhere (e.g., Russia), as well as its targets
  for POPs capacity-building projects.

### TABLES OF RESULTS

The following tables of results include performance results for the 12 FY 2000 APGs that appear in Goal 6. In cases where the FY 2000 APG is associated with an FY 1999 APG, the table includes the FY 1999 APG below the FY 2000 APG for ease in comparing performance.

### FY 2000 Annual Report Annual Performance Goals and Measures - Table of Results

### **GOAL 6 - REDUCTION OF GLOBAL &**

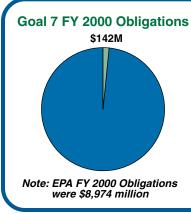
9 Goals 0 Goals	als Met Other	CROSS-BORDER RISKS			
EV 200	O ANNIIAI DE	RFORMANCE GOALS AND MEASURES	FY 2	2000	FY 1999
1 1 200	O ANNOAL I'L	THE OTHER NOTES AND MEASURES	Planned	Actual	Actual
	SISTENT WITH	UNDARY THREATS TO HUMAN HEALTH AND SHAREI OUR BILATERAL AND MULTILATERAL TREATY OBLI WELL AS OUR TRUST RESPONSIBILITY TO TRIBES.	IGATIONS II		
FY 2000 APG 42:		water/wastewater projects along the Mexican border will design-construction for a cumulative total of 30 projects.	5	10	
(FY 1999)	One additional was	ater/wastewater project along the Mexican Border will be n construction.			9
Explanation:	more rapid imple refined by all Bor projects certified	al for FY 2000 was exceeded by five projects due to the mentation of the process that has been developed and der partners. The cumulative total of water/wastewater for design-construction along the Mexican border is actually er than the 30 projects cited in the APG.			
Data Source:	Manual system.				
Data Quality:	Data are manual	y verified.			
FY 2000 APG 43: Performance Meas	-	rovements in Great Lakes ecosystem components.			No FY 1999 APG
- Indicator Indices	S.		9	10	AFG
- Model prediction	ns for toxics reduc	tions.	5	5	
Explanation:	environmental ou year protocols for State, Dissolved and PAHs), Biolo Quality and Rem	al for FY 2000 was to improve the capacity for measuring tcomes by developing better models and indicators. This the ten indices were developed for Limnology (Trophic Oxygen, and Swimmability), Atmospheric (PCBs, Pesticides, gy (Benthic Community Health), Sediments (Sediment ediation), and Fish Contaminants (Safety for Wildlife d Safety for Human Consumption). Outcome reporting will			
		es that atrazine does not appear to breakdown after it enters uently, with continued use, its concentration in Lake Michigan e.			
Data Source:		the Great Lakes National Program Office (GLNPO) base am, which is a cooperative effort of EPA, the Great Lakes			
		ogical Survey, and U.S. Fish and Wildlife Service.			

EV 0000 4	NINHAL DEDEODMANOS COALC AND MEACURES	FY 2	000	FY 1999
FY 2000 A	ANNUAL PERFORMANCE GOALS AND MEASURES	Planned	Actual	Actual
WITH INTERNA	D BEYOND, U.S. GREENHOUSE GAS EMISSIONS WILL BE REDUCED ITIONAL COMMITMENTS AGREED UPON UNDER THE FRAMEWORK NGE, BUILDING ON INITIAL EFFORTS UNDER THE CLIMATE CHANC	CONVENT	ION ON CL	
FY 2000 APG 44:	Assess the consequences of global climate variability at a regional scale.	3	3	
(FY 1999)	Conduct preliminary assessment of consequences of climate change at three geographical locations: (Mid-Atlantic, Gulf Coast, and upper Great Lakes.)			2
Explanation:	Goal met. Results from the three EPA-sponsored Regional Assessments (Mid-Atlantic, Great Lakes, and Gulf Coast) were included in the First U.S. National Assessment report, "Climate Change Impacts on the United States: The Potential Consequences of Climate Variability and Change." Mandated by Congress in the Global Change Research Act of 1990 and organized by the U.S. Global Change Research Program (USGCRP), this is the first comprehensive assessment of the potential impacts of climate change on the United States.			
Data Source:	Agency generated material.			
Data Quality:	As required by the Agency-wide formal peer review policy issued in 1993, and reaffirmed in 1994 and 1998, all major scientific and technical work products used in Agency decision-making are independently peer reviewed before their use. EPA has implemented a rigorous process of peer review for both its in-house and extramural research programs. Peer review panels include scientists and engineers from academia, industry and other federal agencies.			
FY 2000 APG 45:	Assist 10 to 12 developing countries with economies in transition in developing strategies and actions for reducing emissions of greenhouse gases and enhancing carbon sequestration.	10	10	No FY 1999 APG
Explanation:	Goal met.			
Data Source:	Manual system.			
Data Quality:	Data are manually verified.			
FY 2000 APG 46:	Demonstrate technology for a 70 mpg mid-size family sedan that has low emissions and is safe, practical, and affordable.	70 mpg	72 mpg	No FY 1999
Explanation:	Goal met. EPA demonstrated 72 mpg (gasoline equivalent) on a midsize research chassis using a state-of-the art diesel engine and an EPA-invented, patented, and developed hybrid drivetrain.			APG
Data Source:	EPA uses Fuel Economy Test data for both urban and highway test cycles under the EPA Federal Test procedure for passenger cars. EPA fuel economy tests are performed at the National Vehicle and Fuel Emissions Laboratory in Ann Arbor, Michigan.			
Data Quality:	The EPA fuel economy tests are performed in accordance with the EPA Federal Test Procedure and all applicable quality assurance/quality control procedures. The EPA's National Vehicle and Fuel Emissions Laboratory is recognized as the world state-of-the-art facility for fuel economy and emissions testing.			
FY 2000 APG 47:	Greenhouse gas (GHG) emissions will be reduced from projected levels by more than 58 million metric ton of carbon equivalent (MMTCE) per year through EPA partnerships with businesses, schools, state and local governments, and other organizations thereby offsetting growth in greenhouse gas emissions above 1990 level by about 20%.	58	Data available in Spring 2001	

EV 2002 4	ANNUAL DEDECORMANCE COALS AND MEASURES	FY 2000		FY 1999
r i 2000 F	ANNUAL PERFORMANCE GOALS AND MEASURES	Planned	Actual	Actual
(FY 1999)	Reduce U.S. GHG emissions by 35 MMTCE per year through partnerships with businesses, schools, state and local governments, and other organizations.			46
Explanation:	FY 2000: EPA is on track to meet its FY 2000 GHG emissions reduction target of 58 MMTCE.			
	FY 1999: Goal met. Based on information received in FY 2000, EPA exceeded its FY 1999 target of 35. Reductions came from energy star program and multiple sectors including buildings, waste, industrial methane, transportation, and state and local programs.			
Data Source:	Baseline data for carbon emissions related to energy use comes from the Energy Information Agency (EIA). Baseline data for non-carbon dioxide (CO <sub>2</sub> ) gases are maintained by EPA. EPA reports on facility specific energy-saving improvements. A carbon-conversion factor is used to convert this information to estimated GHG reductions. EPA thus maintains a tracking system of emissions reductions based on the reports submitted by its partners.			
Data Quality:	EPA has a quality assurance process in place to check the validity of partner reports. Peer-reviewed carbon-conversion factors are used to ensure consistency with generally accepted measures of GHG emissions. EPA regularly evaluates the effectiveness of its climate programs through interagency evaluations. A 1997 audit by EPA's Office of the Inspector General concluded that the climate programs the were examined "used good management practices" and "effectively estimated the impact their activities had on reducing risks to health and the environment" The voluntary nature of the program may affect reporting. Some of the data are indirect measures of GHG emissions modeled using conversion factors and methods to convert material-specific reductions to GHG emissions reductions.			
FY 2000 APG 48:	Provide analysis, assessment, and reporting support to Administration officials, the Intergovernmental Panel on Climate Change, and the Framework Convention on Climate Change.			No FY 1999 APG
Performance Mea				
- Greenhouse G	as Inventory.	1	1	
Explanation:	Goal met. The Greenhouse Gas Inventory serves as a basis for national actions by countries to reduce their greenhouse gas emissions.			
Data Source:	Information is compiled in accordance with appropriate guidance from the United Nations Framework Convention on Climate Change and other bodies, using data primarily from statistical agencies and scientific literature.			
Data Quality:	All products are subject to internal governmental review as well as full public review. Secondary data used in analysis are generally peer reviewed during development.			
FY 2000 APG 49:	Reduce energy consumption from projected levels by about 60 billion kilowatt hours, resulting in over \$8 billion in energy savings to consumers and businesses that participate in EPA's climate change programs.	60	Data available in FY 2001	No FY 1999 APG
Explanation:	EPA is on track to meet its target.			
Data Source:	EPA collects partner reports on facility specific improvements (e.g., space upgraded, kWh reduced).			
Data Quality:	Same as FY 2000 APG 47.			

EV 0000 4	NINHAL DEDECOMANCE COALS AND MEACURES	FY 2	FY 2000	
FY 2000 A	INNUAL PERFORMANCE GOALS AND MEASURES	Planned	Actual	Actual
BY 2005, OZON	IE CONCENTRATIONS IN THE STRATOSPHERE WILL HAVE STOPPE BEGUNTHE PROCESS OF RECOVERY.	D DECLINI	NG AND S	LOWLY
FY 2000 APG 50:	Provide assistance to at least 50 developing countries to facilitate emissions reductions toward achieving the requirements of the Montreal Protocol.	50	50	No FY 1999 APG
Explanation:	Goal met.			AFG
Data Source:	EPA measures the progress toward international implementation goals by tracking the number of countries receiving assistance, dollars allocated to each, and the expected reduction in ozone-depleting substances in assisted countries. EPA and the United Nations Environment Programme (UNEP) maintain the database.			
Data Quality:	EPA receives periodic reports on the financial status of participating countries from UNEP. Information from UNEP is then cross-checked with Agency records to ensure accuracy.			
FY 2000 APG 51:	Restrict domestic consumption of class II hydrochlorofluorocarbons (HCFCs) below 15,240 ozone depletion potential-weighted metric tons (ODP MTs) and restrict domestic exempted production and import of newly produced class I chlorofluorocarbons (CFCs) and halons below 60,000 ODP MTs.	<15,240 <60,000	Data available in FY 2001	<208,40
(FY 1999)	Ensure that domestic consumption of class II HCFCs will be restricted to below 208,400 Mts and domestic exempted production and import of newly produced class I CFCs and halons will be restricted to below 130,000 MTs.			<130,00
Explanation:	FY 2000: EPA is on track to meet its targets.			
	FY 1999: Goal met. Based on information received in FY 2000, EPA met its FY 1999 target.			
Data Source:	EPA tracks progress on restricting domestic consumption of Class II HCFCs by monitoring industry reports of compliance with phaseout regulations. EPA maintains these data in its Allowance Tracking System (ATS) database.			
Data Quality:	The ATS data are subject to a Quality Assurance Plan. In addition the data are subject to an annual Quality Assurance review. The ATS is programmed to ensure consistency of the data elements reported by companies. Inconsistent data are flagged by the tracking system for review and resolution by the tracking system manager. The ATS receives monthly information on domestic production, imports and exports from the International Trade Commission. This information is then cross-checked with compliance data submitted by reporting companies. Regional inspectors perform inspections and audits on-site at producers, importers, and exporters facilities. These audits verify the accuracy of compliance data submitted to EPA.			
	DUCE THE RISKS TO U.S. HUMAN HEALTH AND ECOSYSTEMS FROM ILATE IN THE ENVIRONMENT AT GLOBAL AND REGIONAL SCALES INTERNATIONAL OBLIGATIONS.			THAT
2000 APG 52:	Successfully conclude international negotiations on a global convention on Persistent Organic Pollutants (POPs) reaching agreement on POPs selection criteria, technical assistance, and risk management commitments on specified POPs.	9/30/00	12/15/00	
(FY 1999)	Obtain international agreement on criteria for selecting POPs to be covered in a new global POPs treaty, and on capacity-building activities to support the convention's implementation.			12/15/0

EV 2000 ANNUAL DEDEODMANOE COAL O AND MEACURES		FY 2000		FY 1999	
FY 2000 A	INNUAL PERFORMANCE GOALS AND MEASURES	Planned	Actual	Actual	
Explanation:	FY 2000: Goal met. The global POPs treaty was concluded in December 2000. Although negotiations were delayed by 3 months into the next fiscal year, the target was met.				
	FY 1999: Goal not met. The achievement of this goal was met during FY 2000.				
Data Source:	Manual system.				
Data Quality:	Data are manually verified.				
The state of the s	ICREASE THE APPLICATION OF CLEANER AND MORE COST-EFFECT RACTICES AND TECHNOLOGIES IN THE UNITED STATES AND ABROUND INTERNATIONAL COOPERATION.			IAL	
FY 2000 APG 53:	Deliver 30 international training modules; implement six technical assistance/technology dissemination projects; implement five cooperative policy development projects; and disseminate information products on U.S. environmental technologies and techniques to 2,500 foreign customers.	30 6 5 2,500	12 6 5 3,100		
(FY 1999)	Deliver 30 international training modules; implement six technical assistance/ technology dissemination projects; implement five cooperative policy development projects; and disseminate information products on United States environmental technologies and techniques to 2,500 foreign customers.			16 6 6 2,500	
(FY 1999)  Explanation:	technology dissemination projects; implement five cooperative policy development projects; and disseminate information products on United States environmental technologies and techniques to 2,500 foreign			6 6	
, ,	technology dissemination projects; implement five cooperative policy development projects; and disseminate information products on United States environmental technologies and techniques to 2,500 foreign customers.  Goal met. EPA met the overall goal. Although efforts on one of the four performance measures fell short, efforts on another performance measure greatly exceeded the target. The same number of people were reached, just through individual process, rather than through training modules. This shortfall in the delivery of the modules can be attributed to (1) leveling off of EPA funds, (2) maturation of our programs, and (3) less demand than originally anticipated. EPA fulfilled all requests for training from countries that			6 6	



### GOAL 7: EXPANSION OF AMERICANS' RIGHT TO KNOW ABOUT THEIR ENVIRONMENT

Easy access to a wealth of information about the state of their local environment will expand citizen involvement and give people tools to protect their families and their communities as they see fit. Increased information exchange between scientists, public health officials, businesses, citizens, and all levels of government will foster greater knowledge about the environment and what can be done to protect it.

### **OVERVIEW**

EPA's right-to-know goal reflects the Agency's commitment to provide the public with information that will help protect human health and safeguard the natural environment. The American public has a right to know about the quality of the air it breathes, the water it drinks, and the food it eats.

The Agency has shifted the focus of Goal 7 to better reflect the priorities set by the Agency when it centralized information policy, management, and technology in a new Office of Environmental Information. EPA's vision for Goal 7 is that environmental information be a strategic resource to enhance public health and environmental protection. This vision, adopted in EPA's revised Strategic Plan that was issued in September 2000, should influence activities at every stage of the information life cycle: creation, storage and management, and analysis and dissemination. This new vision retains the Agency's commitment to the public's right to know about the environment, and strengthens it with a new commitment to ensure the quality, availability, and security of meaningful environmental information.

To attain this vision, the Agency focused on four major areas during FY 2000: protecting and enhancing the quality of environmental information; integrating information; improving access to information; and strengthening information security to keep pace with new threats and technology.

### **FY 2000 PERFORMANCE**

FY 2000 proved to be a successful year for information management in EPA. The Agency achieved all of its annual performance goals and measures under

Goal 7 and made progress toward the vision of information as a strategic resource to enhance public health and environmental protection, particularly in the four main areas of focus.

### Protecting and Enhancing the Quality of Environmental Information

To ensure the strong leadership needed for improving the quality of EPA's information, EPA established the Quality and Information Council (QIC) made up of representatives from the Agency's senior management. In FY 2000 the QIC presided over an assessment of the quality of information in four of the Agency's data systems. The assessment showed that the data in these systems are of high quality and are appropriate for their intended uses. The QIC also began to develop a Data Quality Strategy that will be the blueprint for enhancing the quality of environmental information.

To address the quality of data in EPA's publicly available data sets, EPA developed and implemented the Integrated Error Correction Process (IECP) for reporting and resolving errors identified by the public. The IECP was implemented in the Envirofacts Facility Information system (http://www.epa.gov/enviro) in May 2000 and has made error-reporting tools more prominent and easier to use. It is now used for 11 major EPA data systems.

### **Integrating Information**

To improve the management, utility, and availability of environmental information, in FY 2000 the states and EPA began a joint effort to plan a comprehensive data exchange network that will provide a wide range of information that can be shared among EPA, states,

tribes, localities, the regulated community, and other data partners. The national network will extend beyond past EPA information integration efforts and ensure that future integration efforts by EPA and its partners and stakeholders are consistent and complementary.

EPA's information integration priorities in FY 2000 emphasized creating the building blocks needed for the exchange network including establishing common data standards for environmental information systems, creating a centralized system for electronic data exchange, and establishing an electronic registry for facility identification information.

For integration efforts to succeed, the Agency must continue to strengthen its partnerships with stakeholders. EPA, the states, and tribes established the Environmental Data Standards Council (EDSC) to identify and develop the next set of data standards to be used in collecting, storing, and retrieving environmental data in their respective systems. In FY 2000 the Agency and its partners took several steps toward easing the reporting burden, facilitating data integration, and improving data quality. EPA's Central Data Exchange received official Toxics Release Inventory (TRI) submissions from 80 facilities in Illinois via the Internet. The Agency received the first file with a digital signature from Pennsylvania and also began testing data exchanges with six other states, hoping to conduct exchanges with additional states in FY 2001. The Facility Registry System, a centrally managed

database that identifies facilities subject to environmental regulations or of environmental interest, is now populated with more than 70,000 records. This system will contain 250,000 records by September 2001.

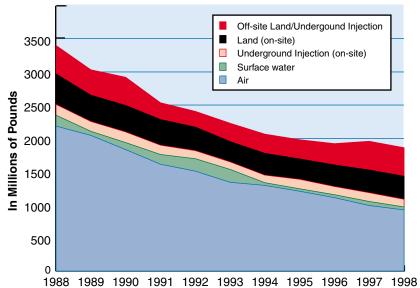
EPA and its partners are moving toward a shared information network. The Agency's One-Stop Reporting Program creates incentives for states to reinvent environmental information management practices through grants and technical assistance. States have undertaken a number of activities under One-Stop, including expanding web sites to improve access; establishing links to EPA databases; integrating isolated, media-specific data sets; and implementing geographic information systems (GIS) to map facility locations. Additional information on the One-Stop

program can be found at <a href="http://www.epa.gov/reinvent/onestop">http://www.epa.gov/reinvent/onestop</a>. In FY 2000 the One-Stop Program met its goal to increase the number of states participating in the program by nine. There are currently 34 states in the program.

### **Improving Access to Information**

FY 2000 brought a number of significant achievements in the TRI Program, which publishes data on toxic pollutants released into the environment. It is one of EPA's most visible right-to-know programs. On May 11, 2000 the Agency released the 1998 TRI Public Data Release Report, which included data for seven new industry sectors, including electric utilities; metal mining; coal mining; chemical wholesalers; petroleum terminals; solvent recovery; and hazardous waste treatment, storage, and disposal facilities. These sectors accounted for nearly 2,000 new facilities and more than 15,000 chemical reports addressing nearly five billion pounds of toxic chemicals, increasing the quantity of chemicals accounted for in the TRI Database by 67 percent. The 1998 TRI data are available on EPA's web site at http://www.epa.gov/tri/tri98. The chart, which displays trend data for the core set of TRI chemicals and manufacturing sectors (that is, it does not include data from the seven new industry sectors), shows a marked decrease in releases over the past 10 years. Note: Goal 4 contains a more in-depth discussion of the trends in the volume and toxicity of TRI wastes.]

TRI Releases, 1988-1998 (using the 1988 core set of chemicals and manufacturing sectors)



Total releases to air, land, water and underground injection have decreased by 1.5 billion pounds or 45% since 1988. Data from the seven new industry sectors that began reporting in 1998 are not included in this graphs.

In May 2000 EPA upgraded the TRI Explorer, an Internet tool that provides fast and easy access to reliable environmental information, making it easier for the public to identify facilities and chemical release patterns in their communities. The latest version provides three times the amount of information available in the previous version and is available on EPA's web site at <a href="http://www.epa.gov/triexplorer">http://www.epa.gov/triexplorer</a>.

Under the TRI Program, EPA is responsible for establishing reporting thresholds for chemical releases to the environment. In FY 2000 the Agency published a final rule lowering the TRI reporting thresholds for persistent bioaccumulative toxic (PBT) chemicals and adding seven more PBT chemicals and two PBT chemical compound categories to the list of toxic chemicals subject to reporting. The first year of PBT chemical reporting was calendar year 2000 and the reports are due to EPA by July 2001.

The Agency met or exceeded all of its established annual performance measures for the TRI Program. These included publishing the 1998 TRI Public Data Release Report, processing 119,000 TRI submissions and revisions from industry, and continuing work on peripheral modules to the new version of the TRI System.

EPA also remains committed to providing real-time monitoring data to communities through its Environmental Monitoring for Public Access and Community Tracking (EMPACT) program (http:// www.epa.gov/empact/index.htm). The EMPACT Program has continued to expand its assistance to local communities in building capacity for real-time monitoring, management, and communication of environmental information. Currently the program, through a network of more than 300 community-based partners, has helped implement real-time environmental monitoring projects in over 90 cities across the United States. These partnerships include state and local governments, tribes, federal agencies, non-profit groups, universities, and other private organizations. In addition to providing grants directly to local communities and supporting projects that partner EPA program and regional offices with local communities, the EMPACT Program has moved into new areas to increase the public's right to know through the institution of technology transfer and integration/networking projects. These projects will allow the transfer of existing EMPACT projects into new communities, as

well as the integration of data from multiple projects to provide a more comprehensive source of information in a specific community.

EPA reached another milestone in increasing the public's access to environmental information that affects their lives on a daily basis. During FY 2000 most Americans received their first annual drinking water quality report from their local water supplier. October 19, 1999 was the first federal deadline for these consumer confidence reports, which tell consumers of public water systems the source of their local tap water, contaminants detected, the likely source of the contaminant, health advice for sensitive populations, and where to go for more information. These reports represent the most widespread right-to-know information provided directly to consumers in EPA's history. Water systems and states were extremely successful in getting these reports out on time. Approximately 53,500 community water systems, serving approximately 253 million people, met the statutory deadline.

Communities have a right to know about the different forces that affect their local environments. EPA's Sector Facility Indexing Project (SFIP) uses the Internet to provide the public with facility-level information in five industrial sectors and is being expanded to also include a subset of federal facilities. The database brings together existing information from a number of Agency data systems and can provide data on a facility's compliance and enforcement history, production capacity, releases and spills, and the demographics of the surrounding community in a single location on the Internet (http:// www.epa.gov/oeca/sfi). EPA is also committed to making its enforcement-related policy and guidance documents available to the public. In FY 2000 the national enforcement and compliance assurance program exceeded its goal by making 94 percent of its policy and guidance documents available through the Internet. Refer to the Tables of Results for further explanation, including a discussion of the Integrated Data for Enforcement Analysis system (IDEA), a tool designed specifically for states, local governments, and federal agencies to access enforcement data.

EPA is working to ensure that no segment of the population or no community bears a disproportionate amount of burden from adverse environmental conditions. The Agency manages an assistance program to help communities; state, tribal, and local government

agencies; grassroots organizations; and other non-governmental organizations become knowledgeable about environmental laws, and to address local environmental and human health concerns. In FY 2000 EPA's Environmental Justice Small Grants Program awarded 62 grants totaling approximately \$900,000. The Agency has also continued to improve public consultation by working with the National Environmental Justice Advisory Council (NEJAC), which was established in 1993, and particularly by increasing the number of meetings that focus on issues (such as permitting) that are central to the concept of environmental justice for all.

EPA's web site (http://www.epa.gov) continues to be an important tool for providing the public with access to environmental information and its popularity continued to grow in FY 2000. Statistics from the month of September 2000 showed a 47 percent increase in the number of visitors over the same period in FY 1999. Also, in a recent survey by Federal Computer Week, EPA's site ranked in the top 15 most effective web sites based on the utility of the information on the site, its organization, and ease of use. The number of pages EPA offers reached 525,796 (an 88 percent increase over FY 1999), and the number of other sites with links to the EPA site grew to 796,103 (a 25 percent increase over FY 1999).

For Earth Day 2000 EPA released a new, more user-friendly version of its web site that included improved search capabilities and introduced the popular topics format common to most informational sites. The new organization and topic buttons help users quickly get to where they want to go. The "Browse EPA" topics page has been enhanced so that visitors can more easily find the information they need within 16 main topic areas, including water, air, pollution prevention, enforcement, and environmental management. The Agency has received many favorable comments on the redesign from visitors to the site.

### **Strengthening Information Security**

The availability and reliability of environmental information depend on the security of the technology platform on which the information resides. EPA made substantial progress toward ensuring the security of its information assets in FY 2000. Following an audit by the General Accounting Office (GAO), EPA temporarily disconnected its network from the Internet

to accelerate installation of improved security features. Since February 2000 the Agency has taken steps to further separate the entire EPA Wide Area Network from the Internet; implement better approaches to monitor, detect, and deter Internet attacks and unauthorized users; conduct formal reviews of information security plans; update EPA's regulations for handling confidential business information and implementing the Freedom of Information Act to ensure adequate protection of information; and increase the Agency's efforts to create a more security-conscious workforce.

To underscore the importance of these efforts, during FY 2000 EPA established a special Technical Information Security Staff to provide a focal point for protecting the Agency's information. The staff reports directly to the Agency's Deputy Chief Information Officer for Technology and is responsible for rapid enhancement of EPA's technical approach to protecting the integrity of information. EPA will continue addressing potential threats to its information systems in FY 2001.

### STRENGTHENING PROGRAM INTEGRITY THROUGH IMPROVED MANAGEMENT

EPA's major information-related management challenges—identified in one or more audits conducted by EPA's Office of the Inspector General (OIG) and GAO—focus on several major themes:

- Information management. EPA must continue to improve the management, comprehensiveness, consistency, reliability, and accuracy of its data to help better measure performance and achieve environmental results.
- Information system security. EPA must enhance the security of its information systems by minimizing the possibility of unauthorized access, use, modification, or destruction of the Agency's information resources.
- Data accuracy and error correction. EPA must improve data completeness, compatibility and accuracy.
- Filling data gaps.
- Improving the collection of accurate data.
- Implementing a quality assurance program Agency-wide and with the states.

Implementing procedures for data error detection and correction.

As the discussion in preceding sections of this chapter shows, EPA, with a focus on information quality, integration, access, and security, is working to address these management issues. Although considerable progress was made in FY 2000, much remains to be done. Information management at EPA will be greatly enhanced with the development of a comprehensive Information Plan that establishes the framework for strategically identifying the information the Agency needs; matches the information and technology resources to meet the need; and establishes processes for addressing information needs, identifying potential data collection efficiencies, and seeking out opportunities to leverage information resources from outside EPA. Also the environmental information exchange network will require effort by EPA, the states, and tribes to move from its current fledgling stage to a fully operational network. Cultural and organizational changes in the way EPA, the states, and tribes plan for and implement new information systems and make improvements to existing systems will be needed. EPA will continue to improve the quality of its information systems and ensure that the Agency has management procedures in place to maintain an effective, consistent quality system. These efforts will remain a priority for the QIC in the future. EPA must also retain its vigilance over information security and take steps to ensure use of the best available information security tools.

Many of the Agency's programmatic and enforcement decisions are based on environmental data produced by EPA's research and analytical laboratories. Data that are timely and of the appropriate quality are critical to understanding environmental processes and to making decisions that will support the protection of human health and the environment. The OIG has noted some concerns about the quality of laboratory data, which led the Agency to declare laboratory quality systems practices as an internal Agency weakness. EPA completed technical reviews of its regional laboratories during FY 2000 and will complete reviews of the remaining Agency laboratories in FY 2001. Section III, FY 2000 Management Accomplishments and Challenges, provides additional discussion on ongoing and future corrective actions that will ensure all environmental data submitted to and used by the Agency, whether from EPA's or other laboratories, are

produced using appropriate systems and controls and meet the Agency's data quality needs.

Please see Section III - Management Accomplishments and Challenges for a further discussion of the above issues.

### RESEARCH CONTRIBUTIONS

Research under Goal 7 supports efforts to enhance the Agency's ability to protect human health and the environment by providing sound environmental information to federal, state, local, and tribal partners. FY 2000 research concentrated on the development of data interpretation and risk communication tools to provide timely, relevant information to the public and environmental decision makers. Research results that assist in environmental decision-making were provided to internal and external users through various tools, databases, manuals, and guidance. For example in FY 2000, considerable progress was made in developing and populating the Environmental Information Management System (EIMS), a web-based inventory that focuses on the organization of descriptive information (metadata) for data sets, databases, documents, models, projects, and spatial data. The EIMS design also provides a repository for scientific documentation that can be easily accessed with standard web browsers at http://www.epa.gov/eims/ eims.html. Research results in FY 2000 also provided consensus human health assessments of environmental substances of high priority to EPA, which were then incorporated into the Integrated Risk Information System and made publicly available at http:// www.epa.gov/iris/index.html. EPA believes it is important for local government bodies and individuals to have access to this information, which can help them make more informed choices to protect human health and the environment.

#### **PROGRAM EVALUATION**

In the past few years GAO and OIG have released more than a dozen audit reports that address issues related to information quality and information management at EPA. These reports have guided work toward improving information management, quality, and security.

In addition to the findings of GAO and OIG, the Agency's TRI Program obtained an independent

assessment of its effort to develop new TRI reporting software for industry. The new system, called Toxics Release Inventory Made Easy (TRI-ME), will replace the Automated TRI Reporting Software (ATRS, available at <a href="http://www.epa.gov/tri/atrs/">http://www.epa.gov/tri/atrs/</a>). TRI-ME, which is more user-friendly than ATRS, will be made available to the public to assist businesses in determining whether or not they need to file TRI reports. If they are required to submit reports, the system will provide the necessary forms. The assessment of the TRI-ME project concluded that TRI-ME is a beneficial and technically achievable project. Version 1.0 of TRI-ME will be released in spring 2001 as a pilot.

### ASSESSMENT OF IMPACTS OF FY 2000 PERFORMANCE ON FY 2001 ANNUAL PERFORMANCE PLAN

FY 2001 Annual Performance Goals (APGs) under Goal 7 reflect successful performance in and performance measurement improvements over FY 2000. For example, the APG for enhanced public access to environmental information includes a target for all ten regions to have a web site with region specific enforcement and compliance information. This APG also includes several new measures in FY 2001 focused on increasing the availability of environmental information on the Internet. In FY 2000 and continuing in FY 2001, the Agency has been moving from a focus on public right to know to a broader focus on quality environmental information for all decision makers. As the new organizational structure for information management has taken shape, the Agency has been working to refocus the long-term goal and objectives to reflect EPA's vision of information as a strategic resource for improving environmental protection. In FY 2002 the Agency expects to refocus its annual goals and targets to reflect better this broader vision.

### TABLES OF RESULTS

The following tables of results include performance results for the five FY 2000 Congressional APGs that appear in Goal 7. In cases where the FY 2000 APG is associated with an FY 1999 APG, the table includes the FY 1999 APG below the FY 2000 APG for ease in comparing performance. Additionally EPA is providing information on FY 1999 APGs that are not associated with any APGs in FY 2000.

### FY 2000 Annual Report Annual Performance Goals and Measures - Table of Results

### GOAL 7 - EXPANSION OF AMERICAN'S RIGHT TO KNOW ABOUT THE ENVIRONMENT

### FY 2000 ANNUAL PERFORMANCE GOALS AND MEASURES

FY 2000		FY 1999	
Planned	Actual	Actual	

BY 2005, EPA WILL IMPROVE THE ABILITY OF THE AMERICAN PUBLIC TO PARTICIPATE IN THE PROTECTION OF HUMAN HEALTH AND THE ENVIRONMENT BY INCREASING THE QUALITY AND QUANTITY OF GENERAL ENVIRONMENTAL EDUCATION, OUTREACH AND DATA AVAILABILITY PROGRAMS, ESPECIALLY IN DISPROPORTIONALLY IMPACTED AND DISADVANTAGED COMMUNITIES.

The Agency will streamline and improve the information reporting process between state partners and EPA by increasing the number of state participants in the One Stop Reporting program from 29 to 38.	38 states	34 states	
The Agency will streamline and improve the information reporting process between state partners and EPA by increasing the number of participants in the One Stop Reporting program (for a total of 29).			25 states
Goal met. In FY 2000 "One Stop" added nine additional states to its roster of participants for a cumulative total of 34. [Note: The FY 2000 baseline (29 states) and target (38 states) did not take into account the lower than expected performance in FY 1999 (25 States).]			
EPA is now in the process of awarding \$500,000 demonstration grants to these nine additional states to further their data integration efforts, improve data access, and reduce reporting burden. Additional information on the One Stop program can be found at <a href="http://www.epa.gov/reinvent/onestop/">http://www.epa.gov/reinvent/onestop/</a> .			
Manual system. EPA tracks the number of state participants in the program.			
Data are manually verified. There are no limitations on the use of this data.			
Improve public access to compliance and enforcement documents and data, particularly to high risk communities, through multimedia data integration projects and other studies, analyses and communication/outreach activities.			No FY 1999 APG
<u>sures</u>			
A policy and guidance documents available on the Internet.	90%	94%	
· · · · · · · · · · · · · · · · · · ·	21 states	34 states	
Goal met.			
<ol> <li>The Agency provides access to a wide array of compliance and enforcement documents and data via the Internet at http://www.epa.gov/ oeca. In FY 2000 EPA's enforcement programs made 2,146 documents available.</li> </ol>			
2. The Agency is also working to improve state access to EPA data systems. In FY 2000 EPA increased the number of states with direct access to			
IDEA from 12 to 34 states by launching an Internet version of the Online Targeting Information System for states at <a href="http://www.epa.gov/idea/otis">http://www.epa.gov/idea/otis</a> . [Note: Prior to FY 2000 states used the EPA mainframe or Windows version of IDEA. IDEA is a comprehensive system that provides multimedia information on the environmental performance of EPA regulated facilities. States can obtain historical profiles of EPA inspections, enforcement actions and associated penalties, and toxic chemical releases.]			
Targeting Information System for states at <a href="http://www.epa.gov/idea/otis">http://www.epa.gov/idea/otis</a> . [Note: Prior to FY 2000 states used the EPA mainframe or Windows version of IDEA. IDEA is a comprehensive system that provides multimedia information on the environmental performance of EPA regulated facilities. States can obtain historical profiles of EPA inspections, enforcement actions and associated penalties, and toxic			
5	state participants in the One Stop Reporting program from 29 to 38.  The Agency will streamline and improve the information reporting process between state partners and EPA by increasing the number of participants in the One Stop Reporting program (for a total of 29).  Goal met. In FY 2000 "One Stop" added nine additional states to its roster of participants for a cumulative total of 34. [Note: The FY 2000 baseline (29 states) and target (38 states) did not take into account the lower than expected performance in FY 1999 (25 States).]  EPA is now in the process of awarding \$500,000 demonstration grants to these nine additional states to further their data integration efforts, improve data access, and reduce reporting burden. Additional information on the One Stop program can be found at <a href="http://www.epa.gov/reinvent/onestop/">http://www.epa.gov/reinvent/onestop/</a> .  Manual system. EPA tracks the number of state participants in the program.  Data are manually verified. There are no limitations on the use of this data.  Improve public access to compliance and enforcement documents and data, particularly to high risk communities, through multimedia data integration projects and other studies, analyses and communication/ outreach activities.  Sures  A policy and guidance documents available on the Internet.  The Agency provides access to a wide array of compliance and enforcement documents and data via the Internet at <a href="http://www.epa.gov/oeca">http://www.epa.gov/oeca</a> . In FY 2000 EPA's enforcement programs made 2,146 documents available.  The Agency is also working to improve state access to EPA data systems.	state participants in the One Stop Reporting program from 29 to 38.  The Agency will streamline and improve the information reporting process between state partners and EPA by increasing the number of participants in the One Stop Reporting program (for a total of 29).  Goal met. In FY 2000 "One Stop" added nine additional states to its roster of participants for a cumulative total of 34. [Note: The FY 2000 baseline (29 states) and target (38 states) did not take into account the lower than expected performance in FY 1999 (25 States).]  EPA is now in the process of awarding \$500,000 demonstration grants to these nine additional states to further their data integration efforts, improve data access, and reduce reporting burden. Additional information on the One Stop program can be found at http://www.epa.gov/reinvent/onestop/.  Manual system. EPA tracks the number of state participants in the program.  Data are manually verified. There are no limitations on the use of this data.  Improve public access to compliance and enforcement documents and data, particularly to high risk communities, through multimedia data integration projects and other studies, analyses and communication/outreach activities.  Sures  A policy and guidance documents available on the Internet.  Goal met.  1. The Agency provides access to a wide array of compliance and enforcement documents and data via the Internet at http://www.epa.gov/oeca. In FY 2000 EPA's enforcement programs made 2,146 documents available.	state participants in the One Stop Reporting program from 29 to 38.  The Agency will streamline and improve the information reporting process between state partners and EPA by increasing the number of participants in the One Stop Reporting program (for a total of 29).  Goal met. In FY 2000 "One Stop" added nine additional states to its roster of participants for a cumulative total of 34. [Note: The FY 2000 baseline (29 states) and target (38 states) did not take into account the lower than expected performance in FY 1999 (25 States).]  EPA is now in the process of awarding \$500,000 demonstration grants to these nine additional states to further their data integration efforts, improve data access, and reduce reporting burden. Additional information on the One Stop program can be found at <a href="http://www.epa.gov/reinvent/onestop/">http://www.epa.gov/reinvent/onestop/</a> .  Manual system. EPA tracks the number of state participants in the program.  Data are manually verified. There are no limitations on the use of this data.  Improve public access to compliance and enforcement documents and data, particularly to high risk communities, through multimedia data integration projects and other studies, analyses and communication/outreach activities.  Sures  Apolicy and guidance documents available on the Internet.  500 the number of states with direct access to Integrated Data for Enforcement  Coal met.  1. The Agency provides access to a wide array of compliance and enforcement documents and data via the Internet at <a href="http://www.epa.gov/oeca.">http://www.epa.gov/oeca.</a> In FY 2000 EPA's enforcement programs made 2,146 documents available.  2. The Agency is also working to improve state access to EPA data systems.

FY 2000 ANNUAL PERFORMANCE GOALS AND MEASURES

FY 2000

Actual

**Planned** 

FY 1999

Actual

FV 0000 =	ANNUAL DEDECORMANCE COAL CAND MEACURES	FY 2000		FY 1999
FY 2000 A	ANNUAL PERFORMANCE GOALS AND MEASURES	Planned	Actual	Actual
	Approximately 500 systems (<1% of the universe) did not issue consumer confidence reports by the October 19, 1999 deadline. These are very small systems, e.g., trailer parks. States and EPA are working with these systems to provide technical assistance. The Agency has already followed up with a number of actions to assure compliance and will continue to do so as appropriate. Many of these systems have since provided the information and EPA expects the remainder to comply with this regulation in FY 2001.			
Data Source:	The Safe Drinking Water Information System (SDWIS) serves as the central repository for data on both the states' implementation of and compliance with existing and new drinking water regulations. States and EPA regions (for "direct implementation" jurisdictions) enter data representing public water systems characteristics and drinking water monitoring into the SDWIS database.			
Data Quality:	SDWIS has a full suite of software-based edit checks and quality assurance procedures to aid accurate data entry. However, there are recurrent reports of discrepancies between national and state databases, as well as specific mis-identifications reported by individual utilities. Given the particular need for confidence in the completeness and accuracy of data about drinking water quality, EPA designated SDWIS content as an internal Agency weakness in 1999 under the Federal Managers' Financial Integrity Act.			
FY 2000 APG 58:	Process all submitted facility chemical release reports; publish annual summary of Toxics Release Inventory (TRI) data; provide improved information to the public about TRI chemicals; and maximize public access to TRI information.			
(FY 1999)	Process 110,000 facility chemical release reports, publish the TRI Data Release Report, and provide improved information to the public about TRI chemicals, enhancing community right-to-know and efficiency processing information from industry.			117,171
Performance Mea	sures			
1. TRI Public Data	a Release.	1	1	
2. Form R's Proce		110,000	119,000	
	Inventor System (TRIS) database complete and report issued.	2/2001	On target	
Explanation:	<ol> <li>Goal met.</li> <li>There is a 15 to 18 month data lag associated with the release of TRI data due to reporting cycles and data QA/QC. In FY 2000 EPA issued The 1998 TRI Public Data Release Report (May 11, 2000). TRI is a valuable</li> </ol>			
	source of information regarding toxic chemicals that are being used, manufactured, treated, transported, or released into the environment. The most recent report included toxic release data from seven additional industrial sectors. As a result of the inclusion of these seven new sectors, together with the manufacturing industry, the total amount of toxic emissions reported in the United States was 7.3 billion pounds. Additional information on TRI can be found at <a href="http://www.epa.gov/tri">http://www.epa.gov/tri</a> .			
	2. *The performance measure as stated above is inaccurate. Facilities are required to report their annual TRI data (Form Rs or Form As) to EPA by July of the following year. Form R, a detailed report of facility activity and emissions, is used when a facility has exceeded EPA established threshold levels. Form A, a less detailed form, is used when a facility releases amounts of TRI chemicals that are below the established threshold. The Agency processes all the reports it receives. This includes Form Rs and Form As as well as revisions and the FY 1999 and FY 2000 results include Form Rs, Form As, and revisions. In FY 2000 the Agency processed 119,000 chemical submissions and revisions, which covered the calendar year 1999 reporting period.			
	<ol> <li>The Agency uses the TRIS data management system to process and store TRI data. Several peripheral modules are scheduled to be completed in time to issue the 1999 TRI Report (2/2001).</li> </ol>			

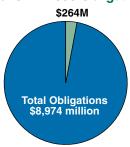
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EV 0000	EV 0000 ANNUAL DEDECORMANCE COALC AND MEACURES	FY 2000 Planned Actual		FY 1999 Actual
F Y 2000	ANNUAL PERFORMANCE GOALS AND MEASURES			
Data Source:	Facility chemical release reports (Form Rs & Form As) submitted by the regulated community are input into and stored in the TRIS data management system.			
Data Quality:	The quality of the data contained in the TRI chemical reports is dependent upon the quality of the data that the reporting facility uses to estimate its releases and other waste management quantities. While the Agency does not control the quality of the data submitted by the regulated community, the Agency does work with the regulated community to improve the quality of their estimates. EPA also provides verification that the information delivered by the facilities is correctly entered into TRIS. Use of these data should be based on the user's understanding that the Agency does not have direct assurance of the accuracy of the facilities' measurement and reporting processes.			

### FY 1999 ANNUAL PERFORMANCE GOALS (NO LONGER REPORTED FOR FY 2000)

- Increase compliance with right-to-know reporting requirements by conducting 1,300 inspection and undertaking 200 enforcement actions.
- By 1999, complete five to seven monitoring pilot projects in Environmental Monitoring for Public Access and Community Tracking (EMPACT) cities, implement timely and high quality environmental monitoring technology in five to seven EMPACT cities.

### Goal 8 FY 2000 Obligations



# GOAL 8: SOUND SCIENCE, IMPROVED UNDERSTANDING OF ENVIRONMENTAL RISK, AND GREATER INNOVATION TO ADDRESS ENVIRONMENTAL PROBLEMS

EPA will develop and apply the best available science for addressing current and future environmental hazards, as well as new approaches toward improving environmental protection.

### Note: EPA FY 2000 Obligations were \$8,974 million

#### **OVERVIEW**

Sound science allows EPA to identify the most important sources of risk to human health and the environment and therefore underpins the Agency's priorities and policies. It is critical that research and scientific assessment be integrated with EPA's policy and regulatory activities. As the Agency addresses increasingly complex issues in the future, its research programs will continue to provide the understanding and technologies needed to detect, abate, and avoid public health and environmental problems. Under Goal 8 EPA conducts core research to improve our understanding of the fundamental principles underlying risk assessment and risk management. Additionally EPA conducts problem-driven research to address specific environmental risks associated with a number of the other strategic goals, and descriptions of this research can be found in the discussion of these goals.

Goal 8 also highlights EPA's commitment to innovative, continuous improvement in how the Agency conducts its business and accomplishes its mission. This commitment, for instance, encourages the use of expert review and collaborative partnerships to ensure the highest level of quality in the Agency's work. Building on its scientific, economic, and regulatory research and analysis activities, EPA strives to make environmental protection more flexible, efficient, and effective, while minimizing the burden on the regulated community.

### **FY 2000 PERFORMANCE**

### **Understanding Ecosystems**

EPA's ecosystems research program serves a key integrative function by enhancing the basic

understanding of the processes that govern ecosystem function as well as the technology needed to model those processes. In FY 2000 EPA continued to conduct research to develop the scientific understanding needed to measure, model, maintain, and restore the integrity and sustainability of ecosystems now and in the future. The Agency focused on developing verified decision support tools and methods and technologies to improve or maintain ecosystem conditions at the watershed scale. Efforts included a methods manual for the collection of biological, chemical, and physical habitat samples and a report on relationships between wetlands and land-use patterns and the quality of streams and biotic communities in watersheds of the Lake Superior Basin.

In 1989, concurrent with the beginning of the Environmental Monitoring and Assessment Program (EMAP), EPA began the Mid-Atlantic Integrated Assessment (MAIA) to provide integrated environmental assessment information as input into future environmental policy decisions. Ten years of representative regional monitoring provided by EMAP have produced several interim assessment products that decision-makers are already using. These reports include An Ecological Assessment of the United States Mid-Atlantic Region: A Landscape Atlas (1998) and The Condition of the Mid-Atlantic Estuaries (1999). A report on the state of Mid-Atlantic region highland streams was produced in FY 2000. The next phase of MAIA is the Regional Vulnerability Assessment (ReVA), part of EPA's FY 2000 initiative for the National Science and Technology Council's cross-Agency Integrated Science for Ecosystem Challenges (ISEC). ReVA will assess and compare current and future (up to 25 years hence) ecological vulnerabilities in the region to improve targeting of restoration and risk reduction activities. (http://www.epa.gov/maia/html/reports.html).

The Agency has also begun similar studies in the western United States and in coastal areas across the nation using EMAP monitoring and sampling procedures developed for use in the Mid-Atlantic region. For example, the Western EMAP Study will test the approach used by MAIA on a larger scale in a region that contains ecosystems, such as arid zones, not found in the Mid-Atlantic region. FY 2000 also marked the first year of the Coastal 2000 Initiative, a national demonstration of the EMAP monitoring design that will provide a comprehensive, statistically valid estimate of the health of the nation's estuaries.

### Understanding and Detecting Risks to the Environment and Human Health

Advances in the state of environmental science have illustrated that new risk assessment methods are needed to investigate complex environmental and human health issues across EPA's environmental protection programs. The unique susceptibilities of infants and children to exposure to toxic substances is an example of such issues.

The Agency is coordinating efforts to develop new methods, models, and measures to address three major areas of scientific uncertainty in human health risk assessment (1) measuring and modeling human exposure, (2) identifying or characterizing hazards and dose response, and (3) characterizing and assessing variation in human exposure and susceptibility to disease. In FY 2000 EPA developed risk assessment guidance and regional assessments for evaluating risks to children exposed to environmental contaminants. In addition the Agency continued its support of the eight pediatric research centers established in 1998 and issued a solicitation for proposals to establish a ninth center to focus on non-asthma-related research issues, such as developmental disorders.

In recent years EPA has begun moving toward a more proactive approach for protecting human and environmental health by anticipating potential risks before they become major concerns. FY 2000 research, for example, focused in part on endocrine disruptors. Specifically FY 2000 research products included protocols to screen pesticides and chemicals found in food and drinking water sources for their potential to cause estrogenic and other endocrine effects. EPA will use these methods to implement the screening and testing program requirements of the Food Quality Protection Act and the Safe Drinking Water Act

Amendments of 1996. Further research identified specific developmental and reproductive effects (and the mechanisms behind them) caused by certain endocrine-disrupting chemicals. Benefits of this work and similar efforts will include an improved framework for Agency decision-making, increased ability to anticipate and perhaps deter serious environmental risks, and enhanced communication with the public and other stakeholders.

In addition to the developments in risk assessment data, EPA's efforts over the past year produced further improvements in the economic information and methods available for use in the Agency's analyses. In FY 2000 the Agency continued to convene workshops for its ongoing economic research and policy series, bringing economists together to explore important topics, such as economic assessments of land use policies, community-based environmental decisionmaking, and methods applied by different government agencies to characterize benefits from enhanced food safety. EPA held additional workshops in collaboration with the Science Advisory Board to better integrate the methods and tools used to assess and manage human health risks, with a focus on characterizing cancer health effects. Also EPA and the National Science Foundation supported a series of new economic research solicitations directed at such priorities as market-based mechanisms and economic incentives, corporate environmental performance and the effectiveness of government intervention, and characterizing children's health benefits.

### **Understanding How to Prevent Pollution**

Research under Goal 8 has also focused on developing innovative pollution prevention strategies and technologies. In FY 2000 EPA undertook research to develop methods and decision tools that are more quantitative and easier for stakeholders and decisionmakers to use when considering pollution prevention strategies, including computer-based tools for chemical and industrial processes. FY 2000 research also accelerated the adoption and incorporation of pollution prevention technologies by developing, testing, and demonstrating techniques applicable across economic sectors. In FY 2000 56 innovative technologies were verified through EPA's Environmental Technology Verification Program, which evaluates the performance of pollution prevention technologies that are ready for commercial application.

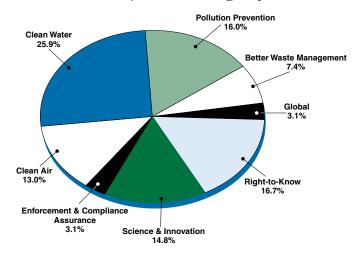
### **Testing Sector- and Facility-Based Innovations**

Another important program under Goal 8 is Project XL, which stands for "eXcellence and Leadership." Project XL is a national initiative that tests innovative ways of achieving better and more cost-effective public health and environmental protection. EPA is using the information obtained and lessons learned from Project XL in redesigning its current regulatory and policysetting approaches. EPA met its goal of 50 signed project agreements by the end of October 2000. To increase the opportunities for broader incorporation of innovative approaches into EPA programs, the Agency is increasing its efforts to identify and develop pilot projects targeted to specific programmatic needs. For example, Project XL is running a series of five projects designed to test alternative approaches for streamlining the water pretreatment program. There are also several projects to test the value of bio-reactor technology for solid waste landfills. The use of this technology could decrease emissions of landfill gas, accelerate waste decomposition, enhance groundwater protection, and increase the waste capacity of existing landfills. More information on Project XL is available on the Internet at http://www.epa.gov/ProjectXL.

Regarding sector-based innovations, EPA developed the *Sector Program Plan 2000-2005*, which has been endorsed by external stakeholders and will complete the integration of sector approaches into core federal and state environmental programs. EPA showed continuing progress in the Metal Finishing Strategic Goals Program, through which over 400 facilities in 21 states have, to date, voluntarily reduced sludge shipments to landfills by over 120 million pounds, wastewater discharges by 380 million gallons, and organic chemical releases by 700,000 pounds. EPA also developed new partnerships with four other industry sectors participating in the Sustainable Industries Program.

In FY 2000 EPA's Regional Geographic Initiative (RGI) supported 137 projects, of which 58 were new projects fostering partnerships in additional parts of the country. All of the projects support Agency initiatives; contribute to at least one of the air, water, waste, toxics, and enforcement environmental goals; and support the overall national EPA mandates. For example, Region 4's Chattanooga Air Toxics Study consolidated monitoring data to develop a risk assessment contributing to Goal 1 air toxics

# FY 2000 Distribution of Regional Geographic Initiative Projects Across Agency Goals



characterization work. In addition Region 8's Missouri River Benthic Fish Study finished field work and moved into data analysis, contributing to Goal 2 clean water efforts.

Goal 8 efforts are also geared toward providing field sampling, analytical and data management support, and quality assurance to Agency programs nationwide. To ensure the highest quality scientific data is being generated by the Regional Science and Technology (RS&T) laboratories, the regions participated in a laboratory assessment program, which included internal reviews and external audits. In addition RS&T "Centers of Applied Science" (CAS) reflect state-of-the-art, nationally recognized expertise responding to Agency and stakeholder needs. In FY 2000 CAS developed methods and standard operating procedures for dioxins and furans, polychlorinated biphenyl (PCB) congeners, explosives, arsenic speciation, endocrine disruptors, and fish tissue extraction. EPA continues to partner with other federal, state, and local agencies to locate, assess, and share environmental data. These efforts build Agency capacity and assist partner agencies by providing technical and analytical support and by converting environmental data of sound and credible quality into useful decision-making information.

# Improving the Production and Use of Science at EPA Through the Science Advisory Board

EPA's Science Advisory Board (SAB) provides independent peer review advice to the Administrator and Congress about the scientific underpinnings of Agency decisions to make a positive difference in the production and use of science at EPA. In FY 2000 the SAB conducted reviews on key pollutants, including arsenic in drinking water and airborne particulate matter; risk assessment methodologies and methods, such as environmental technology verification; and policies, including the use of data from the testing of human subjects. The Board also held workshops to develop ways to merge the social sciences with the biological, chemical, and physical sciences to inform Agency decisions. FY 2000 saw the publication of Toward Integrated Environmental Decision-making. The recommendations of this SAB report (http:// www.epa.gov/sab/ecirp011.pdf) hold the promise of a future of environmental protection that integrates science—and the scientific community—into the broader social enterprise of decision making in newer, more productive, more efficient ways.

### **SUMMARY OF FY 2000 PERFORMANCE**

In summary EPA made significant progress toward this strategic goal in FY 2000. The Agency continued to develop and apply the highest quality scientific methods and tools as it sought solutions to this nation's most pressing public health and environmental problems. EPA also looked to identify those areas that may pose hazards in the future. In addition the Agency continued to address environmental and human health issues through the use of new and innovative approaches that are not only scientifically sound, but also effective, efficient, and flexible.

# STRENGTHENING PROGRAM INTEGRITY THROUGH IMPROVED MANAGEMENT

In FY 2000 EPA continued its efforts to reinvent environmental regulation to achieve better results through the use of innovative and flexible approaches to environmental protection, encourage states, tribes, communities, and citizens to share in environmental decision making, make it easier for businesses to comply with environmental laws, and eliminate unnecessary paperwork. Lessons learned from Project XL pilots are being incorporated into permanent policy changes in EPA's programs and regional offices. The Agency also launched the Performance Track Program during FY 2000, which offers high performing companies a new, more flexible regulatory path. EPA will continue to involve stakeholders from national and local

environmental groups, industry, states, environmental justice organizations, and other interested parties in the design and implementation of these projects and activities.

Please see Section III - Management Accomplishments and Challenges for a further discussion of the above issues.

### PROGRAM EVALUATION

During the past year, EPA has actively participated with the National Academy of Public Administration in the Academy's evaluation of Agency and state reinvention efforts. The Agency reviewed 17 commissioned studies and the Academy's draft report. The final report published in November 2000 made sweeping recommendations to reinvigorate the whole environmental regulatory framework and specifically addressed new approaches for such issues as watersheds, emissions trading systems, adoption of environmental management systems, innovative approaches to permitting, and Superfund reform (http://www.napawash.org/napa/index.html).

### ASSESSMENT OF IMPACTS OF FY 2000 PERFORMANCE ON FY 2001 ANNUAL PERFORMANCE PLAN

Goal 8 Annual Performance Goals (APGs) in FY 2001 reflect generally successful performance in FY 2000.

Environmental research is long-term in nature, and its outcomes are often difficult to predict. Research outcomes do not necessarily occur on a regular basis, but rather at sometimes unexpected points over the lifetime of the work and beyond. A scientific model might yield benefits when it is used in the development of an environmental standard some time after work on the model has ended. Therefore APGs related to EPA's research programs represent those points in time when Agency scientists and engineers hope their work will produce noteworthy accomplishments.

In FY 2000 EPA launched a multiyear planning initiative that charts these critical junctures. This effort has the potential to dramatically streamline and improve the flow of performance results into future research planning. Under the initiative, Agency scientists have formed work groups to develop multiyear plans (MYPs)

Goal 8: Sound Science

for major research programs. These MYPs remain consistent with the Agency's Government Performance and Results Act structure and identify long-term goals for various research strategies. MYPs also present a set of measurable steps that enable achievement of the long-term goals. Although the MYPs cover a period of at least 5 years, they are living documents that are updated annually. Multiyear planning will allow EPA decision makers to better understand the impact of annual planning decisions on future research efforts and resulting performance achievements.

### TABLES OF RESULTS

The following tables of results includes performance results for the FY 2000 five Congressional APGs that appear in Goal 8. In cases where the FY 2000 APG is associated with an FY 1999 APG, the table includes the FY 1999 APG below the FY 2000 APG for ease in comparing performance. Additionally EPA is providing information on FY 1999 APGs for which data was not available when the FY 1999 report was published as well as those FY 1999 APGs that are not associated with any APGs in FY 2000.

# FY 2000 Annual Report Annual Performance Goals and Measures - Table of Results

			2000 Per	form	ance
4	Goals Met	1	Goals Not Met	0	Other

# **GOAL 8 - SOUND SCIENCE, IMPROVED UNDERSTANDING**

		FY 2	2000	FY 1999
FY 200	0 ANNUAL PERFORMANCE GOALS AND MEASURES	Planned	Actual	Actual
	OVIDE THE SCIENTIFIC UNDERSTANDING TO MEASURE, MODEL, MACCALES, THE INTEGRITY AND SUSTAINABILITY OF ECOSYSTEMS N			
2000 APG 59:	Report on monitoring findings in the Mid-Atlantic Region as a cost effective means of measuring the condition of these systems.			
(FY 1999)	Complete and evaluate a multi-tiered ecological monitoring system for the Mid-Atlantic Region and provide select land cover and aquatic indicators for measuring status and trends (2001).			Targe year is FY 200
Performance Mea	<u>sures</u>			
	n the extent and magnitude of fish tissue contamination in small, wadeable Mid-Atlantic Region as means of identifying high risk areas.	1	1	
	the relationship between macro-invertebrate and periphyton assemblages and hysical stressors to verify the applicability of these biological indicators in the gion.	1	1	
Explanation:	Goal met. Reports were completed on monitoring findings regarding fish tissue contamination and biological indicators in the Mid-Atlantic Region. This research supports the long-term goal to design a more cost-effective scientifically sound environmental report card on these ecosystems in the future. The research also supports further development of ecological and biological criteria, improved designs for monitoring surface water quality, new indicators to assist in diagnosing degraded streams, rivers and estuaries, and development of better methods for evaluating improvements.			
Data Source:	Agency generated material.			
Data Quality:	As required by the Agency-wide formal peer review policy issued in 1993, and reaffirmed in 1994 and 1998, all major scientific and technical work products used in Agency decision-making are independently peer reviewed before their use. EPA has implemented a rigorous process of peer review for both its in-house and extramural research programs. Peer review panels include scientists and engineers from academia, industry and other federal agencies.			
ENVIRONME! DEVELOPIN	IMPROVE THE SCIENTIFIC BASIS TO IDENTIFY, CHARACTERIZE, AS NTAL EXPOSURES THAT POSE THE GREATEST HEALTH RISKS TO T G MODELS AND METHODOLOGIES TO INTEGRATE INFORMATION A EFFECTS FROM MULTIPLE PATHWAYS.	HE AMERIC	AN PUBL	IC BY AND
FY 2000 APG 60:	Develop risk assessment guidance and regional assessments concerning risks to children exposed to environmental contaminants.			FY 1999
Performance Mea				
•	le exposures to children in Washington, Minnesota, and Arizona.	1	1	
	use of mechanistic data in developmental toxicity risk.	1 1	1 0	
- Develop exposi	Goal not met. Two of the three critical performance measures supporting this annual performance goal were completed on schedule. The Exposure Factors Handbook was not completed due to the extension of the public comment period. The final handbook will be released in FY 2001. Reports on the use of mechanistic data in developmental toxicity risk assessment and	·		

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Science

EV 0000 A	NAME AND MEASURES	FY 2000		FY 1999
F Y ∠UUU A	INNUAL PERFORMANCE GOALS AND MEASURES	Planned	Actual	Actua
Data Source:	Same as FY 2000 APG 59.			
Data Quality:	Same as FY 2000 APG 59.			
ENVIRONMENT	, ESTABLISH CAPABILITY AND MECHANISMS WITHIN EPA TO ANTICAL OR OTHER CHANGES THAT MAY PORTEND FUTURE RISK, INTERPROPERTION FOR A PROGRAMS, AND PROMOTE COORDINATED PREPARATION FOR A	<b>GRATE FU</b>	TURES PL	ANNING
FY 2000 APG 61:	Develop tools to identify hazards and formulate strategies to manage risks from exposure to endocrine disrupting chemicals (EDCs) capable of inducing adverse effects in humans and wildlife.			
(FY 1999)	Initiate field exposure study of children to two endocrine disrupting chemicals.			Target year is FY 2008
Performance Mea	<u>sures</u>			11200
(EDSTAC) scre	rt on Endocrine Disruptor Screening and Testing Advisory Committee ening process for EDCs and application of the EDSTAC testing program for d and risk assessment.	1	1	
- Characterizatio	n of environmental agents as risk factors in human prostate cancer.	1	0	
- Reports on end contaminated of	docrine and other effects in exposed women and their offspring in a cohort.	2	2	
- Reports on the	molecular mechanisms underlying estrogen receptor functions in mice.	2	2	
- Development a	nd refinement of test methods for use in Tier 1 testing of potential EDCs.	2	2	
- Development o	f amphibian assay for use in hazard identification.	1	1	
Explanation:	Goal met. Tools were developed to help identify hazards and formulate strategies to manage risks from exposure to EDCs. The finding of one report indicated that daughters of mothers exposed to poly-brominated biphenols (PBBs) begin menarche earlier than daughters of unexposed mothers. Methods were developed and refined for use in Tier 1 testing of potential EDCs. Reports were published on the molecular mechanisms underlying estrogen receptor (ER) functions in ER knockout mice and on the development of an amphibian assay used in hazard identification. A position paper that helped determine the application of the EDSTAC testing program for chemical hazard and risk assessment was published. Work characterizing environmental agents as risk factors in human prostate cancer was delayed, but this delay did not prevent substantive achievement of this goal.			
Data Source:	Same as FY 2000 APG 59.			
Data Quality:	Same as FY 2000 APG 59.			
MEASURII	LOP AND VERIFY IMPROVED TOOLS, METHODOLOGIES, AND TECHNG, CHARACTERIZING, PREVENTING, CONTROLLING, AND CLEANICOCIATED WITH HIGH PRIORITY HUMAN HEALTH AND ENVIRONME	ING UP CO	NTAMINA	
FY 2000 APG 62:	Complete development of one or more computer-based tools which simulate product, process, or system design changes, and complete proof-of-process structure for one or more generic technologies (applicable to more than one environmental problem) to prevent or reduce pollution in chemicals and industrial processes.			No FY 199 APG
Performance Mea	<u>sures</u>			
and developme	lopment of PARIS II Software tool to design environmentally benign solvents, int and integration of Waste Reduction (WAR) Algorithm into commercially ical process simulator.	9/30/00	9/30/00	
- Complete Beta	testing of a decision support tool for life-cycle analyses of municipal waste ptions.	9/30/00	9/30/00	

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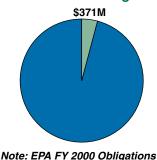
EV 0000 A	EV 2000 ANNUAL DEDECORMANCE COALS AND MEASURES	FY 2	000	FY 1999
FY 2000 A	FY 2000 ANNUAL PERFORMANCE GOALS AND MEASURES		Actual	Actual
Explanation:	Goal met. EPA completed the development of two software programs: the PARIS II Software, a tool to design environmentally benign solvents; and the WAR Algorithm, version 1.0, a commercially available chemical process simulator. Furthermore, the beta testing of a decision support tool used in life-cycle analysis for municipal solid waste management options was completed.			
Data Source:	Same as FY 2000 APG 59.			
Data Quality:	Same as FY 2000 APG 59.			
SECTOR-	5, EPA WILL INCREASE THE NUMBER OF OPPORTUNITIES FOR AND BASED APPROACHES TO ENVIRONMENTAL MANAGEMENT BY 150°  All 50 Project XL projects will be in implementation.			s.
(FY 1999)	50 Project eXcellence and Leadership (XL) Projects will be in development or implementation, an increase of 23 projects over 1998.	30	30	24
Explanation:	Goal met. There are 50 XL projects in place and entering the implementation phase.			
Data Source:	Manual system.			
Data Quality:	Data are manually verified.			

FY 1999 ANNUAL PERFORMANCE GOALS (ACTUAL PERFORMANCE DATA AVAILABLE IN FY 2000 AND BEYOND OR WITH PERFORMANCE TARGETS BEYOND FY 2000)				
		Planned	Actual	
FY 1999 APG:	Develop and verify innovative methods and models for assessing the susceptibilities of population to environmental agents, aimed at enhancing risk assessment and management strategies and guidelines.	Target year is FY 2008		
Explanation:	In FY 2000 work continued to quantify the exposure of children to environmental agents such as organophosphates, trazines, and pyrethroids.			
Data Source:	Same as FY 2000 APG 59.			
Data Quality:	Same as FY 2000 APG 59.			

# **FY 1999 ANNUAL PERFORMANCE GOALS** (NO LONGER REPORTED FOR FY 2000)

- Analyze existing monitoring data for acid deposition and Ultraviolet-B (UVB) and implement a multiple site UVB monitoring system for measuring status and trends.
- Provide ecological risk assessment case studies for two watersheds, final guidelines for reporting ecological risk assessment, and ecological risk assessment guidance and support.
- Produce first generation exposure models describing residential exposure to pesticides.
- Improve Computational Efficiency of Fine Particulate Model by 25%.





were \$8,974 million

# GOAL 9: A CREDIBLE DETERRENT TO POLLUTION AND GREATER COMPLIANCE WITH THE LAW

EPA will ensure full compliance with laws intended to protect human health and the environment.

### **OVERVIEW**

Protecting the public and the environment from risks posed by violations of environmental requirements is basic to EPA's mission. By using tools such as assistance designed to prevent violations, incentives to motivate compliance, and enforcement actions to correct violations and deter others, EPA obtains continuous improvement in compliance with standards, permits, and other requirements. As a result human health is protected, environmental risks are mitigated, and regulated facilities do a better job of environmental management.

In partnership with the states and federally recognized tribes, EPA's enforcement and compliance assurance program regulates approximately 8 million entities that range from community drinking water systems to pesticide users to major industrial facilities. Compliance data are maintained for approximately 1.7 million of these entities. These include municipal sewage treatment plants, large manufacturing and industrial operations, and hazardous waste treatment and storage facilities. The remaining 6.5 million entities range from small business facilities to individual property owners. The variety of regulatory requirements under the various environmental statutes and the large and diverse universe of regulated entities require that EPA use many different tools and strategies to maximize compliance.

EPA addresses compliance problems through a comprehensive, strategic compliance assurance approach. This approach includes a strong program of compliance monitoring, civil and criminal enforcement, compliance incentives and compliance assistance. The Agency's experience has shown that using these tools in a strategic, targeted way addresses noncompliance most effectively. A strong enforcement effort provides

the foundation for the national compliance program, motivates regulated entities to seek assistance and use incentive policies, and provides fairness in the marketplace by ensuring that noncomplying facilities do not gain an unfair competitive advantage.

As a result of the delegation authority provided for by most statutes, state, tribal, and local governments bear much of the responsibility for ensuring the compliance of regulated facilities and other entities. Nationally, states conduct a large majority of all federally-related inspections and formal enforcement actions, and provide most of the data retained in EPA's enforcement and compliance data systems.

### **FY 2000 PERFORMANCE**

FY 2000 was a successful year in achieving compliance. The national enforcement and compliance program met or exceeded 80 percent of its annual performance goals. As a result EPA made great strides toward meeting its mission of protecting human health and safeguarding the natural environment.

### **Enforcing the Law, Achieving Results**

Enforcement actions brought by EPA against a noncomplying facility often result in a reduction in the amount of pollutants the facility discharges to the air, water, or land. EPA's FY 2000 enforcement actions required reduction or prevention of emissions or discharges of an estimated 714 million pounds<sup>1</sup> of pollutants and required the treatment of an additional 1.3 billion pounds of contaminated soils, sediments, or water. Concluded enforcement actions also require changes in facility practices that bring environmental

<sup>&</sup>lt;sup>1</sup>The level of pollutants reduced includes 334 million pounds from FY 2000 civil enforcement actions and 380 million pounds (190,000 tons of nitrogen oxide (NO<sub>2</sub>) and sulfur dioxide (SO<sub>2</sub>)) from the first year of the Tampa Electric Company (TECO) settlement.

### **KEY ENFORCEMENT OUTCOMES**

Enforcement cases concluded in FY 2000 produced the following results:

- 2 billion pounds of pollutants were reduced or treated.
- 75 percent of enforcement actions required various improvements in environmental management.
- Violators spent \$2.6 billion to return to compliance.
- Violators spent \$66.8 million on other environmentally beneficial projects as part of case settlements.

improvements. In FY 2000 approximately 14 percent of concluded enforcement actions required improvements in the use or handling of pollutants, such as changes in industrial processes or storage and disposal practices to achieve emission and discharge reductions. Approximately another 61 percent required improvements in facility environmental management practices, including testing, training, labeling, and overall improvements to environmental management systems. In FY 2000 polluters were required to spend more than \$2.62 billion to correct violations, known as "injunctive relief," and take additional steps to protect the environment. Settlement of enforcement cases also produces supplemental environmental projects (SEPs) in which violators perform additional environmentally beneficial projects in exchange for a penalty reduction. In FY 2000 SEPs totaled \$66.83 million, with Clean Air Act (CAA) settlements accounting for 60 percent of the total.

The Agency uses compliance inspections, investigations and other assessments to determine the compliance status of regulated facilities. In FY 2000 EPA conducted 20,123 inspections and 660 intensive civil compliance investigations. These inspections and investigations resulted in the identification of a number of serious environmental violations, including, but not limited to, pollutant releases not allowed by permit, illegal storage of hazardous waste, and discharge of oil in harmful quantities. Where necessary EPA addresses noncompliance with an enforcement action appropriate to the violation. In FY 2000 EPA took a total of

5,791 civil judicial and administrative enforcement actions, the highest number taken in the past 10 years.

In FY 2000 EPA took many enforcement actions that addressed high risk violations of regulations designed to protect human health and the environment and that led to environmental improvements. A few examples follow:

- As the result of a settlement agreement between EPA and Willamette Industries, the release of approximately 27,000 tons of pollutants to the air will be prevented per year. The agreement covers 13 facilities in four states for violations of CAA provisions designed to ensure that air quality does not deteriorate in areas that have previously been deemed to have clean air. The company will pay the largest CAA civil penalty ever assessed for factory emissions of air pollution—\$11.2 million—which will be shared with EPA and the three states (Arkansas, Louisiana and South Carolina) joining EPA in the action.
- Koch Industries, a petroleum refining firm, agreed to pay a record fine of \$30 million to improve its leak-prevention programs and spend \$5 million on environmental projects for very serious violations of the Clean Water Act (CWA) stemming from oil spills in six states. Most of the spills were caused by the corrosion of pipelines in rural areas resulting in an estimated three million gallons of crude oil and other products leaking into ponds, lakes, rivers, streams, and shorelines.
- In November 1999 EPA filed lawsuits against seven of the nation's largest power generating companies. The filings resulted from one of the Agency's largest investigations targeted at reducing the emissions of nitrogen oxide (NO<sub>2</sub>) and sulfur dioxide (SO<sub>2</sub>) to the air and enforcing the requirements of the CAA. The lawsuits filed alleged that the seven companies' 32 coalfired power plants had been upgraded without adding the needed air pollution controls and that the power plants illegally released massive amounts of air pollutants contributing to some of the most severe environmental problems facing the nation today. The first case settled after the November filings was with the Tampa Electric Company (TECO). Based on the settlement, emissions of NO<sub>2</sub> and SO<sub>2</sub> will be reduced by a combined 190,000 tons annually. The TECO settlement will result in the company installing "best available control technology" at all ten coal-fired power

 $<sup>^2{\</sup>rm The}$  money spent by polluters to correct violations includes \$1.6 billion from FY 2000 cases and \$1 billion from the TECO settlement.

<sup>&</sup>lt;sup>3</sup>The money spent by polluters on SEPs includes \$55.8 million from FY 2000 enforcement cases and \$11 million from the TECO settlement.

plant units at a cost estimated to be approximately \$1 billion, along with additional injunctive relief of approximately \$10 million and a civil penalty of \$3.5 million.

EPA's criminal enforcement program addresses violations that are the result of deliberate or negligent actions. In FY 2000, 477 in-depth criminal investigations were targeted at the most serious and dangerous violators of environmental laws, resulting in 236 cases referred to the Department of Justice for criminal prosecution. Moreover, in criminal cases concluded in FY 2000, violators received 146 total years of jail time. One of the most serious criminal cases involved an Idaho man who received the heaviest federal environmental sentence ever given for knowingly exposing employees to cyanide-17 years for four federal violations. One employee in his twenties was left with permanent brain damage from exposure to deadly cyanide gas. In addition to jail time, the defendant was ordered to immediately pay the victim approximately \$6 million in restitution and pay EPA more than \$300,000 for cleanup costs.

In FY 2000 EPA put into place several outcome measures that allow the Agency to evaluate the compliance behavior of the regulated community. For example, to assess the Agency's effectiveness in deterring recurrence of significant noncompliance problems, EPA is now establishing a baseline for the percentage of significant violators with recurring significant violations within 2 years of returning to compliance. The percentage of facilities with recurring significant violations of the CAA is 20.9 percent; for the CWA 53.5 percent; and for the Resource Conservation and Recovery Act (RCRA) 18.1 percent. EPA is now also measuring the time taken by significant violators to return to compliance or begin implementing enforceable agreements: 1.16 years for CWA and 0.97 years for RCRA. (Final data are not yet available for the CAA.) EPA uses this information to determine how the regulated community responds to being found in significant noncompliance with the law. (Significant noncompliance is carefully defined for each media program based primarily on criteria of severity and duration.) A pilot project to establish statistically valid noncompliance rates for selected regulated populations was undertaken in FY 2000 and is continuing in FY 2001. This effort is verifying the compliance status of selected industries and providing a baseline for

performance measurement in future years. EPA will build on these results to measure changes in behavior as a result of targeted enforcement and compliance assurance activities.

# **Increasing Compliance Through Incentives** and Assistance

EPA promotes the compliance of the regulated community through a program of incentives and assistance. The Agency has two significant incentives policies that are designed to address different groups of the regulated community—the Audit/Self-Policing Policy and the Small Business Policy. These policies provide incentives for regulated facilities to detect, disclose, and correct environmental violations and they produce excellent results. These results are reflected in

# AUDIT INITIATIVE IMPROVES COMMUNITY RIGHT-TO-KNOW

Since 1988 Toxics Release Inventory (TRI) provisions of the Emergency Planning and Community Right-To-Know Act (EPCRA) Section 313 has required the reporting of nitric acid treatment and "coincidental manufacture" of nitrates. EPA was concerned that nitrate discharges were not being reported by certain industries, even though the Agency disseminated instructions and guidance about nitrate reporting under TRI. Such discharges can adversely affect local water quality and drinking water sources.

EPA focused on six industry sectors in which underreporting was suspected, first offering companies the opportunity to disclose and correct violations under the Audit Policy or the Small Business Policy. Sixty days later EPA sent letters to 600 companies that did not utilize the audit policies, offering the opportunity to provide the nitrate reports for a reduced penalty. EPA also offered the option of additional penalty reduction for those facilities that would conduct a facility audit for other EPCRA reporting violations.

More than 130 companies reported using the audit or small business policies, 350 companies agreed to report and pay a reduced penalty, and more than 1,000 facilities will report and audit for EPCRA compliance. Participants in the initiative have filed over 5,000 TRI reports totaling more than 50 million pounds of nitrate compounds as a result of this and other EPA initiatives. Communities will now have access to more information on the discharges of nitrates and other substances from local plants.

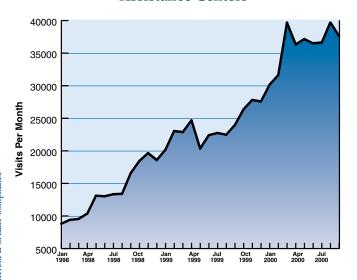
Goal 9: Credible Deterrent & Greater Compliance

the FY 2000 self-disclosures—430 companies reported violations at 2,200 facilities.

The Small Business Compliance Policy provides penalty waivers to small businesses that, following the policy's criteria, voluntarily discover, disclose, and correct a violation. FY 2000 modifications to the policy expanded the situations in which a business could use this tool to include any voluntarily discovered violations, not merely violations discovered as a result of on-site compliance assistance or audits. The updated policy also extends the disclosure period from ten to 21 days, allowing small businesses more time to consider the policy, resolve any questions, and prepare their disclosure letters.

EPA has developed a wide range of tools and services that improve understanding of regulatory requirements and provide compliance assistance. The Agency reached 455,581 entities in FY 2000 through various activities: on-site visits, hotlines, workshops, training, and distribution of compliance assistance tools. These tools included sector guides, fact sheets, and compliance checklists. EPA targets compliance assistance activities to regulated facilities, states, trade associations, compliance assistance providers, the public, universities, and nonprofit organizations. Recipients may access Agency information through different pathways, including the Internet.

# Growing Public Use of Compliance Assistance Centers



In FY 2000 EPA continued to support the ten Internet-based Compliance Assistance Centers created to help small and medium-sized businesses, local governments, and federal facilities understand and comply with their regulatory obligations. In FY 2000

target audiences and the public visited the Centers more than 400,000 times, an increase of 56 percent from FY 1999. These visits included over one million requests for web pages and targeted compliance documents.

EPA regions conducted ten projects for which they measured outcomes of compliance assistance activities. The projects involved a combination of workshops, on-site assistance, and written assistance. EPA surveyed project participants and learned that on average, 77 percent of responding recipients indicated an increased understanding and awareness of regulations as a result of the assistance provided. Also, 64 percent of the responding recipients indicated that they had taken at least one action to comply with the environmental regulations as a result of the assistance received.

EPA also provides support to regulatory partners through development of user-friendly guides, reference materials, assisted inspections, and training. To enhance the expertise of state and tribal inspectors, EPA conducted 713 assisted inspections. In addition the Agency conducted 154 training classes or seminars for states, localities, and tribes to improve their ability to identify and reduce noncompliance. EPA also provided 34 states with direct access to the user-friendly On-line Targeting and Information System, exceeding its target of 21 states. This system provides states with enhanced information about noncompliance patterns.

### **SUMMARY OF FY 2000 PERFORMANCE**

EPA's FY 2000 performance in the enforcement and compliance program reflects strong progress in achieving the goal of a credible deterrent to pollution. The program relies on traditional measures coupled with new outcome-oriented measures to evaluate progress and document results. In FY 2000 the program achieved high levels of performance in inspections and enforcement actions, as well as record levels for delivering compliance assistance, promoting selfdisclosures, and delivering compliance tools. These activities all contributed to EPA greatly exceeding the target for real environmental results: pounds of pollutants reduced. EPA also established several key baselines for the program from which to evaluate the future environmental results of actions taken. The enforcement and compliance program is maintaining a strong foundation and integrating innovative approaches to ensure full compliance with laws intended to protect human health and the environment.

# STRENGTHENING PROGRAM INTEGRITY THROUGH IMPROVED MANAGEMENT

As a result of concerns about data quality and the age and usefulness of EPA enforcement and compliance data systems, the Agency initiated a process to modernize data systems that would result in the integration of enforcement and compliance information from various media. This effort has been carefully coordinated with EPA's broader effort to address data integration and modernization across the Agency.

A particular area of focus for EPA is the CWA Permit Compliance System (PCS). EPA has worked with the states to identify problems and define the revisions needed to PCS that are critical to effective National Pollutant Discharge Elimination System (NPDES) program management and oversight. In partnership with the states, EPA is reengineering PCS to better address current requirements of the NPDES permitting and enforcement programs and to meet the demands of new initiatives such as tracking reduced pollutant loadings, capturing information on storm water sources, and assessing the health of individual watersheds.

Please see Section III - Management Accomplishments and Challenges for a further discussion of the above issues.

### **PROGRAM EVALUATION**

In response to a request from Congress, in March 2000 the General Accounting Office (GAO) issued the report Pesticides: Improvements Needed to Ensure the Safety of Farmworkers and their Children (RCED-00-40) (http:// www.gao.gov) on issues related to the safety of children who may be exposed to pesticides in agricultural settings. The report recommended (1) improving data on acute pesticide illnesses, (2) taking steps to protect children younger than 12 years old that work in agriculture or are otherwise present in pesticide-treated fields, (3) completing the documentation on the adequacy of EPA's Worker Protection Standard entry intervals for children 12 years old or younger that work in agriculture, and (4) strengthening EPA's oversight of the states' implementation and enforcement of the Standard. The Agency initiated a review of national, regional, and state enforcement of the Standard. Using a newly developed Standard protocol, EPA is currently engaged in regional and state reviews to assess whether changes are needed to the implementation and oversight of the Standard to protect the health of farmworkers and their children.

# ASSESSMENT OF FY 2000 IMPACTS ON THE FY 2001 ANNUAL PERFORMANCE PLAN

Performance in FY 2000 largely met or exceeded expectations. In a few areas EPA has adjusted performance targets for FY 2001. For example, the target for the amount of pollutant reduction from concluded enforcement actions has been significantly increased, as has the number of inspections. Additionally in FY 2000, the Agency found it more difficult than anticipated to arrive at an accurate first-time count of results for several new measures. Examples are the percent of inspections and investigations (civil and criminal) conducted at priority areas and the number of EPA-assisted inspections to build enforcement capacity for states and tribes. EPA is considering ways to improve the measurement of these activities.

The Agency is continuing to improve annual performance goals (APGs) and performance measures for Goal 9, reflecting more experience in measuring enforcement and compliance assurance activities. In FY 2000 the program successfully established baselines for the following: timelines for return to compliance by significant violators; percent of significant violators with recurrent significant violations; and statistically valid compliance rates on permit exceedances based on self-reported information from the regulated community. EPA is using this information for new performance measures for FY 2001.

In addition to these new outcome-oriented performance measures, the Agency has also added measures in FY 2001 for the number of concluded enforcement actions that result in improvements in facility management and information practices, as well as training to build enforcement capacity for tribal and state personnel. Also EPA refined its measures for voluntary self-disclosure and violation correction, and for the handling of hazardous waste import and export notices.

### TABLES OF RESULTS

The following tables of results includes performance results for the five FY 2000 APGs that appear in Goal 9. In cases where the FY 2000 APG is associated with an FY 1999 APG, the table includes the FY 1999 APG below the FY 2000 APG for ease in comparing performance. Additionally EPA is providing information on FY 1999 APGs that are not associated with any APGs in FY 2000.

# FY 2000 Annual Report Annual Performance Goals and Measures - Table of Results



EV 000	ANNUAL DEDECOMANCE COAL CAND MEACURES	FY 2	2000	FY 199
FY 2000	O ANNUAL PERFORMANCE GOALS AND MEASURES	Planned	Actual	Actual
	ND REDUCE SIGNIFICANT NON-COMPLIANCE IN HIGH PRIORITY PINING A STRONG ENFORCEMENT PRESENCE IN ALL REGULATOR			
FY 2000 APG 64:	Deter and reduce noncompliance and achieve environmental and human health improvements by maintaining a strong, timely and active enforcement presence. EPA will direct enforcement actions to maximize compliance and address environmental and human health problems; 75% of concluded enforcement actions will require environmental or human health improvements such as pollution reduction, etc.			
(FY 1999)	Deter noncompliance by maintaining levels of field presence and enforcement actions, particularly in high risk areas and/or where populations are disproportionately exposed. In 1999, EPA will conduct 15,000 inspections and undertake 2,600 enforcement actions.			21,410 3,935
Performance Mea	sures			
- Estimated poun	ds of pollutants reduced (aggregate).	300 M	714 M	
<ul> <li>Percent of action</li> </ul>	ns which require pollutant reductions.	35	13.6	
<ul> <li>Establish statist problems.</li> </ul>	cically valid noncompliance rates or other indicators for selected environmental	5	5	
	eline to measure percentage of significant violators with reoccurring significant at two years of returning to compliance.	1	1	
	eline to measure average length of time for significant violators to return to enter enforceable plans/agreements.	1	1	
- Produce report concluded.	on the number of civil and criminal enforcement actions initiated and	1	1	
Explanation:	Goal met with 75% of concluded enforcement actions requiring environmental and human health improvements. Approximately 14% of concluded enforcement actions required improvements in the use or handling of pollutants, such as changes in industrial processes or storage and disposal practices to achieve emission and discharge reductions. Approximately another 61% required improvements in facility environmental management practices, including, testing, training, labeling, and overall improvements to environmental management systems. In managing for environmental results, EPA significantly exceeded the target of pounds of pollutants reduced and treated as a result of enforcement actions. This large increase over the target was due to the settlement of the Tampa Electric Company (TECO) case. In setting the FY 2000 target, resolution of the TECO case was not anticipated. In addition, EPA required treatment of 1.3 billion pounds of contaminated soils, sediments and water. The Agency will report several new performance measures in FY 2001 on the outcomes resulting from concluded enforcement actions. The percentage of overall actions that required pollutant reductions fell below the target. This is partly because, in fulfilling a new regulatory requirement, drinking water utilities were required to provide consumer confidence reports (CCR) on the quality of their drinking water. Until most states assume delegation for this program in FY 2001, EPA had made this an enforcement priority. (In FY 1999 there were 313 settlements; this grew to 2,134 settlements in FY 2000.) As these enforcement actions result in CCR publication rather than direct pollutant reduction, the percentage of actions that required pollutant reductions fell below the target. EPA is considering revising downward the target for this measure in FY 2001.			
Data Source:	Regional offices calculate the results of enforcement actions and enter the information in the DOCKET system. DOCKET tracks EPA civil, judicial and administrative enforcement actions. The Permit Compliance System (PCS) tracks permit and enforcement actions on effluent discharges. The Air Facility			

EV 0000 5	NINUAL DEDECORMANCE COALS AND MEASURES	FY 2	2000	FY 1999
FY 2000 A	ANNUAL PERFORMANCE GOALS AND MEASURES	Planned	Actual	Actual
	Sources System (AFS) captures emission compliance and permit data for major stationary sources and air pollution. The Resource Conservation and Recovery Information System (RCRAInfo) is a national database that supports the Resource Conservation and Recovery Act (RCRA) program and contains information on entities that are engaged in hazardous waste generation and management activities regulated under the hazardous waste part of RCRA.			
Data Quality:	EPA manages 14 national data systems containing enforcement and compliance data. The Agency has concerns about the quality and completeness of data, ability of existing systems to meet data needs, and incompatible database structures/designs. EPA has begun to address data quality, is committed to data integration and modernization efforts, and believes promoting greater public access to data will result in improved data quality. As part of agreement between the headquarters and regional offices, the Agency is placing greater emphasis on strengthening the quality of this data.			
	In FY 2000 the Agency continued to modernize its data systems and completed the concept and requirements phase for the new Integrated Compliance Information System (ICIS). ICIS will be an integrated enforcement and compliance data management system that will support core information needs. ICIS will track facility inspections, violations and enforcement actions, as well as address more complex needs for compliance assistance tracking, multimedia planning, targeting and evaluations. As EPA migrates data into ICIS, the data will undergo quality control.			
FY 2000 APG 65:	Ensure compliance with legal requirements by assuring that hazardous waste exports from the U.S. are properly handled. Implement U.S. international commitments, and gain enforcement and compliance cooperation with other countries, especially along U.S. borders (Mexico/Canada).	1,500	1,584	No FY 1999 APG
Performance Mea	<u>sures</u>			
•	nce with legal requirements by assuring that hazardous waste exports from the re properly handled (number of import and export notices filed and reviewed).			
Explanation:	Goal met. EPA met the goal of ensuring compliance with legal requirements for hazardous waste exports by reviewing and responding to all submitted waste import/export notifications. EPA is revising this annual goal and performance measure in FY 2001 to reflect better the EPA review and response to the notices for transboundary movement of hazardous wastes.			
Data Source:	The Hazardous Waste Export System maintains manual reports submitted by United States exporters. The Waste Import Tracking System maintains manual reports submitted by foreign governments.			
Data Quality:	Hazardous waste import/export notifications are self-reported and, thus, are subject to bias. EPA works with the U.S. Customs Service to ensure the quality of data and compliance by exporters/importers with legal requirements.			
FY 2000 APG 66:	EPA will conduct 13,500 inspections, 500 criminal investigations, and 150 civil investigations, 50% of which are targeted at priority areas.			
	Deter noncompliance by maintaining levels of field presence and			21,410 3,935
(FY 1999)	enforcement actions, particularly in high risk areas and/or where populations are disproportionately exposed. In 1999, EPA will conduct 15,000 inspections and undertake 2,600 enforcement actions.			
Performance Mea	enforcement actions, particularly in high risk areas and/or where populations are disproportionately exposed. In 1999, EPA will conduct 15,000 inspections and undertake 2,600 enforcement actions.  Sures			
Performance Mea - Number of EPA	enforcement actions, particularly in high risk areas and/or where populations are disproportionately exposed. In 1999, EPA will conduct 15,000 inspections and undertake 2,600 enforcement actions.  sures inspections.	13,500	20,123	
Performance Mea - Number of EPA - Number of civil	enforcement actions, particularly in high risk areas and/or where populations are disproportionately exposed. In 1999, EPA will conduct 15,000 inspections and undertake 2,600 enforcement actions.  sures inspections. investigations.	150	660	
Performance Mea  - Number of EPA  - Number of civil  - Number of crim	enforcement actions, particularly in high risk areas and/or where populations are disproportionately exposed. In 1999, EPA will conduct 15,000 inspections and undertake 2,600 enforcement actions.  sures inspections.	1		

EV 2000 4	ANNIIAI DEDEODMANCE GOALS AND MEASURES	FY 2	FY 2000	FY 1999
F Y 2000 A	ANNUAL PERFORMANCE GOALS AND MEASURES	Planned	Actual	Actua
Explanation:	Goal not met. Actual inspections surpassed targets and this target increases for FY 2001. The Agency exceeded the target for civil investigations because of investigations in the new media enforcement areas of the Oil Pollution Act and the Emergency Planning and Community Right to Know Act. EPA fell short of the target for criminal investigations due to an Agency hiring freeze. EPA is revising downward the target for this measure in FY 2001. For the major media programs, the percentages of inspections in high priority areas were: Clean Air Act–38%; Clean Water Act–34%; and RCRA–35%. The annual goal and measure for the percentage of inspections and investigations conducted at priority areas proved difficult to define and calculate, and is not a measure in FY 2001.			
Data Source:	The Integrated Data for Enforcement Analysis (IDEA) System integrates data from major enforcement and compliance systems (e.g., PCS, AFS, RCRAInfo), including data from states.			
Data Quality:	See APG 64, first paragraph.			
FY 2000 APG 67:	Improve capacity of states, localities and tribes to conduct enforcement and compliance assurance programs. EPA will provide grants, guidance documents, training, classes and seminars, and assist with selected inspections.			
(FY 1999)	Assist states and tribes with their enforcement and compliance assurance and incentive programs. EPA will provide specialized assistance and training, including 83 courses, to state and tribal officials to enhance the effectiveness of their programs.			218
Performance Mea	sures			
	a-assisted inspections to build capacity.  a training classes/seminars delivered to states/localities and tribes to build	100 200	713 154	
Explanation:	Goal met. EPA significantly exceeded its target of conducting EPA-assisted inspections to improve capacity of states, localities and tribes. State/tribal partners often request that EPA accompany them when they undertake enforcement and compliance assurance site visits. EPA exceeded the target for this first-time measure due to difficulty in defining EPA-assisted inspections. As a result EPA is considering increasing the target for this measure in FY 2001. EPA missed its target for delivering training classes/ seminars to state/localities and tribes due to budget constraints but reached the comparable number of students in FY 2000 as in FY 1999 through distribution of computer-based and video-based training products. EPA is adding new measures in FY 2001 including the number of tribal personnel trained and the number of computer-based training modules developed.			
Data Source:	Manual system. Reports on EPA-assisted inspections are completed by regional staff and tracked by headquarters. Manual reports also provide information to National Enforcement Training Institute's (NETI) course information management systems and the NETI registrar.			
Data Quality:	Data are manually verified.			

=>/		FY 2	000	FY 1999
FY 2000 A	FY 2000 ANNUAL PERFORMANCE GOALS AND MEASURES		Actual	Actual
	TE THE REGULATED COMMUNITIES' VOLUNTARY COMPLIANCE WIT QUIREMENTS THROUGH COMPLIANCE INCENTIVES AND ASSISTAN			
FY 2000 APG: 68:	Increase entities self-policing and self-correction of environmental problems through use of EPA incentive policies: small business, small community and audit policies over FY 1997 levels.			No FY 1999 APG
Performance Meas	sure			
- Number of facili	ities that self-disclose potential violations.	346	2,200	
Explanation:	Goal met. EPA exceeded its goal of increasing entities' self-policing and self-correction of environmental problems because of unexpected increases in the number of facilities using the policies. Increased publicity about the modified policies and Agency initiatives—especially those involving companies with multiple facilities nationwide—and the cooperation of these companies, contributed to the successful outcome. EPA revised this measure for FY 2001 to reflect the completion of settlements with facilities to voluntarily self-disclose and correct violations. However, EPA does not expect the large one-time increase in number of self-disclosures in FY 2000 to stay at that same high level in FY 2001. EPA will expand efforts to specifically encourage disclosure from companies suspected of having serious violations, which, as a class, occur less frequently and require more complex analysis to address.			
Data Source:	The DOCKET System tracks EPA civil, judicial and administrative enforcement actions.			
Data Quality:	This is the first year of relying on the DOCKET system for the data. EPA is in the process of assessing data quality and identifying any necessary changes.			

# FY 1999 ANNUAL PERFORMANCE GOALS (NO LONGER REPORTED FOR FY 2000)

- Target high priority areas for enforcement and compliance assistance and complete baseline data assessment in major databases needed to measure quality of key indicators of compliance. The Agency will identify five high priority areas and improve two data systems.
- Increase regulated community's use of compliance incentives and their understanding of, and ability to comply with, regulatory requirements. The Agency will continue to operate nine small business compliance assistance centers and will complete sector notebooks, guides, and other outreach materials begun in FY 1998.

# Roal 10 FY 2000 Obligations \$438M Note: EPA FY 2000 Obligations were \$8,974 million

### **GOAL 10: EFFECTIVE MANAGEMENT**

EPA will establish a management infrastructure that will set and implement the highest quality standards for effective management and fiscal responsibility.

### **OVERVIEW**

EPA management provides vision, leadership, and support for all Agency programs. The effectiveness of EPA's management and the delivery of administrative services will determine, in large measure, the Agency's success in achieving its environmental mission. Sound leadership, proactive human resources management, rational policy guidance, innovation, quality customer service, consultation with stakeholders, results-based planning and budgeting, and fiscal responsibility provide the foundation for everything EPA does to advance the protection of human health and the environment. In addition work under Goal 10 ensures that EPA's management systems and processes will be supported by independent evaluations that promote operational integrity and efficient, effective programs. As stated in the Overview and Analysis section, EPA has made progress in strengthening results-based management through its planning and accountability processes and is working to promote more outcome-oriented goals and measures to further improve performance measurement. EPA has made significant progress in ensuring the security of its financial systems consistent with the Federal Financial Management Improvement Act.

In fulfilling its managerial commitments, the Agency focuses on five overarching priorities: managing human capital, streamlining business processes and meeting customer needs, investing in infrastructure, protecting children's health, and improving management and program operations.

### **FY 2000 PERFORMANCE**

### **Managing Human Capital**

The Agency faces a number of challenges in managing its human capital resources, including the expected retirement of a large number of senior employees, which threatens to deplete EPA's pool of critical skills: retaining and recruiting a highly skilled and diverse professional and technical staff; providing employees with the competencies they need to effectively address the Agency's strategic goals; and building a sense of community while recognizing differences as contributions to the whole.

### **VALUES**

EPA respects and values integrity, the trust and confidence of the public, diversity of cultures and thinking, competence, innovation, continuous learning, and sound science. We treat our people fairly and with respect, and encourage a spirit of teamwork and the consistent practice of these values.

Source: Human Capital Strategy

To address these issues the Agency drafted a strategic plan for investing in human resources, the "Strategy for Human Capital." The Strategy represents the first time EPA has developed a strategic direction for investing in and managing its human resources. To support the Strategy, the Agency has:

- Tested five pilot training courses to provide Agency mid-level managers with the competencies they need to successfully support the EPA mission.
- Implemented the Agency's Hispanic and Asian Outreach Strategies to enhance the career development and recruitment of Hispanics and Asians in federal employment.
- Recruited the third class of interns, which will provide the Agency with a diverse, high-potential cadre of future leaders.

 Completed a Labor Relations Strategic Plan that established specific targets for the Agency managers and union representatives to aim for over the next 12 months.

In FY 2000 EPA made inroads in promoting diversity and fairness in the workplace by tasking managers and employees to continue to work collaboratively in accomplishing the goals of the Agency's Diversity Action Plan and ensuring review of the Agency's hiring, promotion, and award practices. Following the plan also ensured that EPA employees were trained in working with tribes on a governmentto-government basis to enhance the protection of tribes and tribal lands. The Agency's recruitment program was modified in 2000 to decentralize the management of recruitment activities to the regional and field human resources offices. Agencywide progress in 2000 has demonstrated improvement in minority representation within the Senior Executive Service (SES). An increase in the number of minorities and women also occurred in the SES feeder groups, GS-13 and above. Please see Section III - Management Accomplishments and Challenges for a further discussion of the above issues.

# **Streamlining Business Processes and Meeting Customer Needs**

In FY 2000 EPA took a number of steps to streamline and automate its administrative systems and processes to provide the best customer service at the least cost and burden to the taxpayer. For example, EPA is automating the entire travel reimbursement process to obtain a significant reduction in administrative burden. EPA earned a prestigious federal award in recognition of its efforts, along with several other agencies, to implement an online system that allows employees to view and update many payroll and benefits options such as health plan choices. The Agency also made substantial progress in replacing its aging payroll system, and efforts are now under way to replace the Integrated Financial Management System. In addition EPA developed a financial data warehouse to improve Agency access to a range of financial and program data to better manage programs. EPA also reduced administrative burden and improved customer service by consolidating several local payment functions, and the resources saved were redirected to support environmental goals.

In the area of financial management, two major accomplishments have improved EPA's ability to set

priorities and manage for results. First, a major new accounting methodology adopted for the Superfund Trust Fund will increase cost recoveries for that program and serve as a model for indirect cost accounting in other programs. Second, EPA continues to take aggressive steps to promptly redirect unspent funds from inactive contracts and assistance agreements to other site response activities where funding is needed. For example, in FY 2000 the Agency redirected about \$166 million in unspent funds within the Superfund Program.

Increased use of automation continues to improve EPA's ability to manage for results, reduce burden, and gain efficiencies. The Agency added cost accounting features to its Budget Automation System in FY 2000 so that the system more clearly links budgetary resources with the achievement of environmental results. Measurable results of EPA's automation efforts include \$775,000 in rebates and discounts for prompt payment earned in FY 2000 as well as continued reduction of overhead costs through the electronic transfer of funds. In FY 2000 virtually all payments to contractors and employee salary payments were made electronically rather than by check.

Throughout FY 2000 EPA continued to introduce innovative approaches to providing electronic commerce for both the grants and contracts programs. For example, Agency grant recipients are beginning to benefit directly from a new system that allows them to request their funds online. The Agency brought all 11 Grants Management Offices online and fully implemented Phase I of the Integrated Grants Management System, a paperless programmatic and administrative system that will fully automate the grants process from pre-award activities to closeout. EPA is now in a position to accept electronic applications from grantees and make electronic awards, making the grant process faster and more user-friendly. In the area of contracts management, significant progress was made during FY 2000 in developing a Program Office Interface for the Integrated Contracts Management System. This new interface will streamline and automate communications and provide for the electronic routing of contracts-related documents among program offices, contracting offices, and EPA contractors. The Agency has achieved significant improvements in increasing the percentage of performance-based contracts, which are considered more cost-effective and result in the contractors assuming a greater share of the risk. EPA

had set a performance goal of awarding 11 percent of its new procurements as performance-based by FY 2000 and exceeded that goal by awarding 14 percent of its contracts as performance-based.

### **Investing in EPA's Infrastructure**

EPA has a master plan for making ongoing investments in state-of-the-art construction and infrastructure renovations to its office facilities and laboratories to provide a safe and healthy environment for its employees and the surrounding communities. In FY 2000 the Agency continued its commitment to using "Green Power"—renewable electric power—for its facilities. The Agency purchased 100 percent renewable energy for three regional laboratories: Golden, Colorado; Manchester, Washington; and Chelmsford, Massachusetts. This action will reduce the Agency's dependence on fossil energy, comply with lower energy consumption goals under Executive Order 13123, and promote market penetration of renewable energy technologies.

A key component of this master plan is the new headquarters project, which is unique in the federal building universe. The design work focuses on achieving indoor air quality and energy efficiency, and it incorporates sustainable design practices within the context of federal design and procurement practices. The Agency was assigned 1.2 million square feet of space in the Federal Triangle to serve as its consolidated headquarters. Although this was not enough space to accommodate all of the EPA headquarters staff, the Agency accepted the new assignment because of the need to vacate Waterside Mall and the desirability of the Federal Triangle location. In FY 2000 the Agency moved additional employees, bringing the total number of employees relocated to the new headquarters complex to 3,400. Over the next 20 months, an additional 2,500 people will be moved.

EPA also continued to promote the Laboratories for the 21<sup>st</sup> Century (Labs21) initiative. In conjunction with the U.S. Department of Energy, the Agency provided technical assistance to pilot laboratory partners from the federal, state, and private sectors, sharing technical information and innovative whole-laboratory designs for reducing pollution and energy and water consumption. In September 2000 Labs21 became a part of Project XL (eXcellence and Leadership), a voluntary program that encourages state and local government agencies, businesses, and federal facilities to test cleaner, cheaper, and smarter ways to attain environmental



results superior to those achieved under current regulations and policies. The web site for the Labs21 initiative is http://www.epa.gov/labs21century.

EPA has implemented an aggressive strategy to reduce energy consumption in its facilities. Results include a 19 percent decrease in energy consumption in Agency-owned laboratories—from 374,000 Btu/ft² in 1985 to 304,000 Btu/ft² in 2000. By FY 2001 the Agency will have begun operations at three new energy-efficient laboratories.

### **Protecting Children's Health**

In FY 2000 EPA made significant progress in its efforts to protect children from potential environmental hazards. The Agency provided leadership for federal efforts to address asthma and lead poisoning (two major children's health issues) and raised awareness about the effects of exposure to environmental hazards on children by incorporating environmental health issues into the activities of youth organizations. EPA reshaped its policy on science and risk assessment for children's environmental health, guiding the development of an Agency-wide strategy for research on environmental risks to children. In addition action was taken to reduce risks to children by considering such risks specifically in new and reevaluated standards and regulations.

In August 2000 EPA issued the Interim Evaluation Report of the Child Health Champion Community Pilot Program established in 11 communities across the United States. The evaluation assessed the feasibility of community-led approaches to children's health protection and how best to support such efforts in the future. Interim report findings indicated that broadbased community participation efforts are difficult without funding; tension exists between local community empowerment and federal laws and policies (including funding limitations on activities); and limited local information and data on human health issues hinder planning for local action. All 11 communities, despite the difficulties and limitations, are continuing their efforts to implement their programs in FY 2001.

### **Improving Management and Program Operations**

The Agency's Office of Inspector General (OIG) met its goal to increase its effectiveness in detecting and deterring fraud and other improprieties by increasing the number of assistance agreement and contract cases, improving the percentage of cases referred for action, and reducing the average time for case completion. The OIG continued to emphasize an investigative initiative to uncover criminal activity in the awarding and delivery of assistance agreements and contracts. Fraud awareness briefings, an important part of fraud prevention and detection efforts, were held for EPA employees and state and local law enforcement organizations to address vulnerabilities to fraud, waste, and abuse. In addition the OIG developed an initiative to perform investigations of intrusive activities that affect the Agency's computer systems and to partner with other agencies in the growing effort to protect government computer systems. Overall investigative activity resulted in \$70.8 million in fines, recoveries, restitutions, and savings and 105 judicial, administrative, and other actions. OIG investigations consistently yielded significant monetary and environmental results, as indicated in the following examples:

- An EPA contractor agreed to a \$24 million settlement in a civil lawsuit alleging that the company billed government agencies for computer center costs in excess of the costs actually incurred.
- A firm agreed to a \$35 million settlement in a civil lawsuit alleging that it had charged excessive lease costs to EPA and several other government agencies.
- A company agreed to pay \$1.75 million in fines and restitution for failing to disclose to government officials that the wastewater it discharged directly into Dryman Bay in Sarasota County, Florida, was not properly treated.

The OIG provided timely, independent auditing and consulting services responsive to the needs of customers and stakeholders by identifying means and opportunities for increased economy, efficiency, and effectiveness in achieving environmental results. The OIG made its audit products and services more customer- and goal-driven by implementing an extensive customer input and survey process, reengineering the audit planning and development process, and expanding advisory services. As a result the OIG achieved its highest level of customer

### OIG PROFILE OF PERFORMANCE

✓ Questioned Costs/Savings (millions)	\$55
✓ Environmental Program Improvements	78
✓ Fines, Recoveries, Settlements (millions)	\$71
✓ Criminal, Civil, Administrative Actions	105
✓ Customer Service Rating	76%

satisfaction as determined through surveys of EPA management and staff. The OIG added four new areas to its list of Agency Top Ten Management Challenges provided annually to Congress. In addition the OIG made numerous recommendations for improving Agency business practices and environmental results, including the following areas (1) submitting timely and complete financial statements that are accurate and have adequate accounting support, (2) strengthening controls over access to sensitive data on the Agency's mainframe computer, and (3) operating a viable asbestos inspection program to ensure that school districts comply with the Asbestos Hazard Emergency Response Act.

The OIG developed a new strategic plan that charts a course through FY 2005. It builds on past accomplishments and establishes new directions for contributing to improved environmental quality and human health. This plan will be enhanced through the creation of a new OIG Office of Program Evaluation to assess the linkage and impact of EPA actions and programs. The OIG's challenge is to perform work related to each of EPA's ten goals and measure progress and performance using a "balanced scorecard" combining outcomes, financial indicators, and customer satisfaction rather than the traditional monetary results approach.

Additionally the OIG implemented an outreach plan for improving OIG performance. The plan was designed to involve customers and stakeholders in planning the products and services for delivery, measure performance in meeting customers' needs, promote the benefits and value of OIG work and seek opportunity for collaborative partnerships. For example, the OIG formed the Environmental Consortium of the President's Council on Integrity and Efficiency, which includes the General Accounting Office (GAO) and 19 executive agencies, whose goal is to achieve greater efficiencies and more effective solutions to cross-cutting environmental issues. The OIG is also developing similar partnerships with state environmental agencies.

# SUMMARY STATEMENT OF FY 2000 PERFORMANCE

The Agency made tremendous progress toward achieving Goal 10 and its objectives. Many significant steps were taken to strengthen the integrity of program operations. EPA has developed a strategic approach to manage human capital, took a number of steps to streamline and automate various administrative systems and processes, continued to reduce energy consumption in its facilities, made significant progress in efforts to protect children from potential environmental hazards, and increased effectiveness in detecting and deterring fraud and other improprieties.

# STRENGTHENING PROGRAM INTEGRITY THROUGH IMPROVED MANAGEMENT

EPA completed several major actions in FY 2000 to strengthen the management of the taxpayers' dollars used to support the Agency's grant and contract programs. The Agency implemented a comprehensive strategy of technical assistance, monitoring, and oversight to help ensure that grantees properly expend federal funds on ongoing projects and achieve results that will benefit the public. In addition the Agency closed out an estimated backlog of 20,000 grants originally reported to Congress in July 1996, ensuring that all unused funds were deobligated and redirected to other environmental projects or returned to the Federal Treasury. In the contracts area, EPA negotiated a settlement with two major contractors in which the government and the U.S. taxpayers realized \$390 million in savings.

EPA has taken numerous steps to remedy the problems that led to a qualified audit opinion from the Inspector General on its FY 1999 financial statements and is pleased to report that the FY 2000 statements have earned an unqualified opinion. Recent improvements include strengthening quality controls and financial systems security; developing additional policies and procedures for preparing the statements; providing expert training to the Agency's financial management staff; and compiling interim financial statements for use as a "dry-run" to identify potential problems. EPA also contracted with the Department of the Treasury for technical assistance and focused on recruiting and hiring experienced staff knowledgeable about federal accounting standards. EPA continues to improve its capabilities related to cost

accounting, illustrated by revisions to the account structure that linked the Agency's financial resources to the elements of the Strategic Plan.

In FY 2000 EPA made progress in improving the security of financial information systems, but additional measures are needed to meet the security challenges of the rapidly changing cyber world and effectively move toward electronic government. Reviews of Agency security practices by GAO and OIG revealed a number of vulnerabilities. In response EPA has thoroughly evaluated its current practices and is implementing costeffective means of ensuring the security of the Agency's financial information systems and the transactions processed. For example, EPA established a cross-office financial information security council; updated hardware and software; initiated a structured process to identify, assess, and mitigate risks; and improved financial system documentation, technical and management controls, and security training.

The OIG identified accountability as a management challenge for the Agency, stating that EPA needs to take further action to develop accountability systems that tie performance to its organizational goals. The Agency has made significant progress to strengthen results-based management, and it continues to work toward more effectively linking assessments of program performance with resource decisions as well as identifying goals and measures that will allow for trends analysis over time. EPA has efforts underway to improve cost accounting to better link budgetary resources with the achievement of environmental results and to provide for more informed decision-making. In addition the Agency is replacing its aging financial and payroll systems and improving the use of automation to reduce burden and gain efficiencies.

The Agency is undertaking several actions to improve its ability to manage administrative complaints alleging discrimination under Title VI of the Civil Rights Act of 1964. Title VI prohibits discrimination on the basis of race, color, or national origin by any entity that receives federal financial assistance. EPA's Title VI complaints investigation program has had difficulty meeting regulatory deadlines for processing and investigating complaints. The Agency is temporarily assigning additional case managers to expedite processing and reduce the current backlog of 61 Title VI complaints that require an investigation or a jurisdictional determination. In addition the Agency is

working to improve its long-term efficiency by developing needed guidance on processing complaints and by reducing the processing time for sending letters on acceptance, rejection, or referral of complaints.

Title VII of the Civil Rights Act of 1964 requires implementation and management of an effective federal discrimination complaints process that provides employees and applicants for employment an opportunity to seek redress. The Agency has several problems that adversely affect the timeliness of the discrimination complaints process, including lack of accurate and timely data in the tracking system; late, incomplete, or missing discussions of allegations in counselors' reports; and insufficient contractor support. The Agency has initiated several corrective actions to be fully implemented by September 2001, including weekly monitoring of all actions in the discrimination complaints inventory and the recruitment and hiring of four additional employees for the Title VII team.

Over the past several years, the Agency has undertaken a comprehensive strategy to streamline the grants management process, provide ongoing assistance agreement training and ensure accountability for oversight responsibilities. During FY 2001 the Agency plans to conduct a series of management assessment reviews in EPA program offices and regions to assess the adequacy of the administrative and programmatic management of assistance agreements. EPA will continue, on an ongoing basis, to provide training for EPA staff and to conduct periodic reviews to ensure ongoing compliance with Agency policy and federal laws relative to assistance agreements.

Please see Section III - Management Accomplishments and Challenges for a further discussion of the above issues.

### **PROGRAM EVALUATION**

EPA undertook several evaluations in FY 2000 to review the effectiveness of its program strategies and guidance in achieving program goals and safeguarding resources.

 Conducted a program evaluation that led to the redesign of the business processes of the EPA Computer Center. The Center provides a range of computing services to Agency customers and is supported by customer payments. The new design features streamlined business practices and a new

- rate structure that more accurately aligns prices for services with the Center's costs.
- Executed an annual review of its General Services Administration leased space. The review verified space measurements, ensured that EPA was billed correctly, validated space utilization needs, and ensured that rents were comparable to prevailing market rates. This careful management of EPA's inventory has ensured the best possible utilization of space and has yielded the Agency substantial savings.
- Conducted Management Oversight Reviews across the Agency to ensure that each Grants Management Office engages in sound grants management practices and follows established grant rules, regulations and policies.

### ASSESSMENT OF IMPACTS OF FY 2000 PERFORMANCE ON FY 2001 ANNUAL PERFORMANCE PLAN

Overall, FY 2000 performance under Goal 10 was as expected, and FY 2001 Annual Performance Goals (APGs) build on this success. EPA is improving accountability for Agency results-based management processes and financial management functions by developing more outcome-oriented goals and measures and by incorporating feedback from customers and stakeholders into its annual performance goals and measures. In developing outcome-oriented performance results, EPA has committed to increasing the percentage of outcome-oriented annual performance goals and performance measures reported in the Agency's FY 2002 Annual Performance Plan by 4 percent over FY 2001.

### TABLES OF RESULTS

The following tables include performance results for the five FY 2000 APGs that appear in Goal 10. In cases where the FY 2000 APG is associated with an FY 1999 APG, the table includes the FY 1999 APG for ease in comparing performance. Additionally EPA lists the FY 1999 APGs that are no longer reported for FY 2000.

# Goal 10: Effective Management

### FY 2000 Annual Report Annual Performance Goals and Measures - Table of Results

	GOAL 10 - EFFECTIVE MANAGEME	ENT		
FY 2000 ANNUAL PERFORMANCE GOALS AND MEASURES			FY 2000	
F1 200	Planned	Actual	Actual	
	FICE OF THE ADMINISTRATOR AND DEPUTY ADMINISTRATOR WILL HIP (WITHIN THE AGENCY, NATIONALLY AND INTERNATIONALLY) AS DIRECTION AND POLICY OVERSIGHT FOR ALL AGENCY PROC	S WELL AS		
FY 2000 APG 69:	Evaluate health outcomes related to environmental health effects for asthma and lead addressed in 11 Pilot Child Health Champion Communities.			No FY 1999 APG
Performance Mea	<u>sure</u>			
- Issue report on	health outcomes.	1	1	
Explanation:	Goal met. EPA met this goal by issuing the Interim Evaluation Report of the Child Health Champion Community Pilot Program in August 2000. The interim evaluation focused on community-level coalition building, project planning, and implementation planning processes within each of the 11 communities. The final report will provide a complete picture of activities, findings, and lessons learned from the pilot program.			
Data Source:	All data are being provided by the communities. EPA will compile and analyze the data supplied by the communities.			
Data Quality:	The communities are making every attempt to provide good quality data. The data quality, however, will vary by community because of the types of interventions being implemented, availability of health and non-health outcome data, availability of database and database expertise, and limited resources to assemble outcome data.			
	OVIDE THE MANAGEMENT SERVICES, ADMINISTRATIVE SUPPORT A SSARY TO ACHIEVE ITS ENVIRONMENTAL MISSION AND TO MEET IT WORKFORCE RESPONSIBILITIES.			TIONS
FY 2000 APG 70:	100 percent of EPA's Government Performance Results Act (GPRA) implementation components (planning, budgeting, financial management, accountability, and program analysis) are completed on time and meet customer needs.	100%	85%	9/30/99
(FY 1999)	By the end of 1999, the Agency can plan and track performance against annual goals and capture 100% of costs through the new PBAA structure, based on modified budget and financial accounting systems, a new accountability process, and new cost accounting mechanisms.			9/30/99
Explanation:	Goal not met. The Agency, however, did make notable progress toward the goal as follows:			
	- EPA delivered its FY 1999 Annual Performance Report to Congress on March, 31, 2000.			
	- EPA delivered the Revised Strategic Plan to Congress by September 30, 2000 meeting the GPRA requirements.			
	<ul> <li>EPA substantially improved internal processes and submitted the financial statements on time. Although the Agency received a qualified audit opinion from the Inspector General on the FY 1999 financial statements, EPA has taken significant steps to remedy the issues raised and has earned an unqualified opinion in FY 2000.</li> </ul>			
	- EPA evaluated options for replacing its aging payroll system and made a selection based on a thorough business case analysis. In 2000 EPA replaced an ancillary financial reporting system with a data warehouse providing better			

an ancillary financial reporting system with a data warehouse providing better access and reporting capabilities, and enhanced the cost accounting

EA 3000 V	NNUAL PERFORMANCE GOALS AND MEASURES	MANCE GOALS AND MEASURES		FY 199	
1 1 2000 A	THORE I LITE OF WARD GOALS AND WEASURES	Planned	Actual	Actua	
	features of its Budget Automation System (BAS) to more closely link resources to accomplishments. These cost-effective improvements, along with comprehensive efforts in security, enhanced EPA's financial systems capabilities. EPA plans to take advantage of the Joint Financial Management Improvement Program testing to support development of options for replacing its core Integrated Financial Management System (IFMS).				
	<ul> <li>EPA budgeting processes executed resource adjustments necessary to meet emerging priorities to satisfy Agency and Congressional requirements.</li> </ul>				
Data Source:	The Performance and Environmental Results System (PERS) houses data for GPRA performance goals and measures as a basis for the Annual Performance Report. IFMS contains the data for the financial statements. The BAS supports the budget processes.				
Data Quality:	Because PERS and BAS are databases that primarily house information from Agency program databases, most of the quality assurance and control efforts focus on ensuring effective data entry. EPA's quality assurance program for IFMS includes automated data checks and edits as well as periodic quality assurance reviews.				
FY 2000 APG 71:	All 58 mission-critical systems will continue to support core Agency functions without interruption across Year 2000 date change.	100%	100%		
(FY 1999)	All mission-critical systems will continue to support core Agency functions without interruption across Year 2000 date change.			100%	
Explanation:	Goal met. This Annual Performance Goal carried over in order to ensure that all mission critical systems were Year 2000 (Y2K) compliant on January 1, 2000. EPA continued monitoring and maintenance of these systems to ensure a smooth transition to Year 2000 date change.				
Data Source:	Manual system.				
Data Quality:	Data are manually verified.				
	VIDE A QUALITY WORK ENVIRONMENT THAT CONSIDERS EMPLOY OPERATIONS, UTILITIES, FACILITIES, NEW CONSTRUCTION, REPA PREVENTION, WITHIN HEADQUARTERS AND NATIONWIL	AIRS, AND			
FY 2000 APG 72:	EPA will ensure that all new and ongoing construction projects are progressing and completed as scheduled.				
(FY 1999)	Complete at least 50% of construction of the consolidated research lab at Research Triangle Park, North Carolina.			60%	
(FY 1999)	Continue renovation of the new consolidated headquarters complex, completing 100% build out of the Ariel Rios north and Wilson Building, and 50% of the Interstate Commerce Commission, and moving 38% of EPA personnel from vacated spaces to the new consolidated complex.			90% 50% 31%	
Performance Mea	sures				
•	new Research Triangle Park building construction completed.	80%	80%		
ŭ	he Interstate Commerce Commission construction completed.  EPA personnel consolidated into Headquarters complex.	80% 40%	80% 40%		
Explanation:	Goal met. Construction completion is progressing as planned.	10 /0	1070		
Data Source:	Manual system.				
Data Quality:	Data are manually verified.				
	•				

FY 2000 ANNUAL PERFORMANCE GOALS AND MEASURES		FY 2000		FY 1999
FY 2000 A	Planned	Actual	Actual	
EPA WILL PRO	OF WHICH	CAN FAC	ILITATE	
FY 2000 APG 73:	Office of Audit will provide timely, independent auditing and consulting services responsive to the needs of our customers and stakeholders by identifying means and opportunities for increased economy, efficiency, and effectiveness in achieving environmental results.			
(FY 1999)	In 1999, the OIG will provide objective, timely and independent auditing, consulting, and investigative services through such actions as completing 15 construction grant closeout audits.			24
Performance Mea	sures			
- Potential monet	\$64 M	\$55.3 M	\$128.8 M	
•	e Office of Inspector General (OIG) recommendations or actions taken to my, efficiency, and effectiveness.	63	78	60
- Overall, custom	er and stakeholder satisfaction with audit products and services.	75%	76%	75%
Explanation:	Goal met. The OIG met its annual performance goal of providing timely, independent auditing and consulting services. Although the monetary value resulting from the work was less than projected, the OIG identified the amount of ineligible, unsupported, and unnecessary/unreasonable costs to the extent possible in the audits performed. Monetary estimates are based on professional judgment since there is no way of determining in advance precisely the amounts of disallowed costs.			
Data Source:	The database for the OIG recommendations and the potential monetary value of recommendations, questioned costs, savings, and recoveries is the Inspector General Operations and Reporting System. There is no formal database for customer/stakeholder satisfaction; information for these areas is extracted from audit reports and survey responses.			
Data Quality:	The OIG will continue working in FY 2001 to strengthen data quality in the Inspector General Operations and Reporting System.			

# FY 1999 ANNUAL PERFORMANCE GOALS (NO LONGER REPORTED FOR FY 2000)

- By the end of 1999, evaluate five EPA regulations to ensure they are protective of children's health.
- EPA will improve the quality, effectiveness and efficiency of EPA's acquisition and contract management process by completing 10% of contracts utilizing performance-based statement of works.
- Implement Phase 1 of the Integrated Grants Management System award module in all regions.

# FY 2000 ANNUAL REPORT

# MANAGEMENT ACCOMPLISHMENTS AND CHALLENGES

SECTION III



### MANAGEMENT ACCOMPLISHMENTS AND CHALLENGES

One of the most critical challenges facing federal managers today is preserving the public's trust in the integrity of government programs. The U.S. Environmental Protection Agency (EPA) is strongly committed to achieving its goals and objectives in a manner that maintains this integrity. Over the past several years EPA senior managers have placed a high priority on strengthening results-based management and overall accountability and on improving the efficiency and effectiveness of environmental programs.

Section III provides a comprehensive discussion of EPA's management and performance challenges and the Agency's strategy to resolve these issues. (The most significant of these, and their relevance to the achievement of the Agency's mission, are also addressed in the preceding goal chapters.) This section also meets reporting requirements of the Federal Managers Financial Integrity Act (FMFLA), The Inspector General Act Amendments, and the Reports Consolidation Act of 2000, as discussed below.

Integrity weaknesses and major management challenges represent deficiencies in program policies, guidance, or procedures that may impair the Agency's ability to achieve its mission and weaken the safeguards against fraud, waste, abuse, and mismanagement. These issues are identified through internal Agency reviews and through independent reviews and audits by the General Accounting Office (GAO), the Office of Management and Budget (OMB), and EPA's Office of Inspector General (OIG). EPA managers work diligently to identify strategies to address these issues, set milestones, and take prompt corrective action. For some management problems the Agency has put annual performance goals in place to track progress. Currently, two of the five integrity weaknesses and five of the 19 management challenges are linked to Government Performance and Results Act (GPRA) goals. Although the Agency does not have specific goals for all integrity weaknesses and major management challenges, EPA's senior leadership monitors all problems closely.

Under FMFIA, all federal agencies must submit an annual Integrity Act Report to the President and Congress and provide reasonable assurance that policies, procedures, and guidance are adequate to support the achievement of their intended mission, goals, and objectives. Agencies also must report material weaknesses—those deficiencies that are found to impair achievement of their missions—and

identify corrective action strategies being instituted to remedy the problems. EPA senior managers periodically report to the Administrator on efforts under way to address material weaknesses and other less serious but important problems. EPA's record in correcting its integrity weaknesses has steadily improved over the past decade. Since 1990 EPA has corrected 27 integrity weaknesses and numerous major management challenges.

### FISCAL YEAR 2000 ANNUAL ASSURANCE STATEMENT\*

I am pleased to report that EPA's annual self-assessments of the Agency's internal controls, management and financial control systems, with the exception of noted material weaknesses, provide reasonable assurance that the Agency's programs and resources are protected from fraud, waste, and mismanagement.

Carol M. Browner Administrator

Rawl M. Brown

\* Assurance statement is required by December 31, 2000 under the Federal Managers Financial Integrity Act.

The Inspector General Act Amendments of 1988 require federal agencies to report to Congress twice a year on the status of efforts to carry out corrective actions and reach final action on OIG audits. EPA managers are vigilant in carrying out timely and effective audit management practices. Since 1996 the number of audits without final action one year after the management decision has decreased by nearly 50 percent. In FY 2000 EPA was responsible for 503 audits; by year's end 40 were without final action one year after the management decision date.

As required by the Reports Consolidation Act of 2000, OIG's list of top management challenges facing the Agency along with its assessment of EPA's progress in addressing these challenges is included at the end of this section. The Agency's response to the OIG statement is included as part of the discussion of corrective action strategies for integrity weaknesses and major management challenges.

### INTEGRITY ACT REPORT

The Agency is declaring three new material weaknesses for FY 2001 on Title VI and VII of the Civil Rights Act of 1964 and Information Systems Security and is continuing to address two weaknesses from the previous fiscal year: National Pollutant Discharge Elimination System (NPDES) Permits and Construction Grants Closeout. These are described below, along with a summary of corrective actions and expected completion dates.

1. Backlog of Title VI (Civil Rights Act of 1964) Discrimination Complaints (Goal 10): Title VI prohibits discrimination on the basis of race, color, or national origin by any entity that receives federal financial assistance. The number of Title VI administrative complaints that require an investigation or a jurisdictional determination by EPA is 61 and growing. EPA's program to investigate Title VI complaints generally does not meet regulatory deadlines for processing and investigating complaints.

Corrective Action Strategy: In addition to the four temporary employees hired as Title VI case managers for 2-year terms, four employees will be detailed to the Office of Civil Rights from regions and programs to complete a civil rights investigation. By the end of the third quarter FY 2001 EPA will improve the long-term efficiency of the program by finalizing Draft Revised Investigations Guidance, issuing final guidance regarding alleged discrimination against persons with limited English proficiency, issuing standardized procedures on preparing complaints for the investigation process, and drafting protocols for conducting adverse impact analyses and statistical demographic analyses. Completion of corrective actions is expected by the end of FY 2001.

2. Deficiencies in Internal Employment Discrimination Complaints Resolution Process under Title VII (Civil Rights Act of 1964) (Goal 10): Title VII requires that EPA implement and manage an effective federal discrimination complaints process that provides employees and applicants for employment an opportunity to seek redress. Difficulty in managing the Equal Employment Opportunity (EEO) process in a timely manner is attributable to several factors, including inadequately trained counselors; lack of accurate and timely data in the tracking system; late, incomplete, and/or missing discussion of allegations in counselors' reports; an inability to utilize the automated data

tracking system effectively; insufficient contractor support to manage the investigations process; and a lack of staff to handle the current inventory of 269 complaints.

Corrective Action Strategy: Corrective actions currently under way include utilizing attorneys from the Civil Rights Law Office to review and provide advice on final Agency decisions; to provide regions with monthly status reports on the inventory of complaints and overdue reports and with feedback on inadequate submissions; and to devote more attention to each area of the process currently needing improvement. Completion of corrective actions is expected by September 2001.

3. Information System Security (Goal 7): EPA needs a centralized security program with strong oversight processes to address risks adequately and ensure that valuable information technology resources and environmental data are secure. The Agency is strengthening its information security program by instituting a comprehensive strategy that addresses all security-related deficiencies, including currently identified weaknesses covering Information Systems Security Plans and Cyber Security. In doing so, EPA is taking a systematic approach to correct its information security weakness by FY 2002. (FY 1997–2000 OIG major management challenge; FY 2000 GAO and OMB major management challenge; declared a material weakness FY 1997 and an expanded material weakness FY 2000.)

Corrective Action Strategy: Though EPA has corrected the most serious security vulnerabilities, several significant milestones remain. Corrective actions currently under way include completing security risk assessments of critical applications and systems, evaluating network and data security, installing network intrusion detection and monitoring controls, conducting training, certifying security plans for all critical security systems, finalizing EPA's National Network Security Policy, validating success of policy and guidance, and conducting random program office formal security plan reviews of mission-critical systems. All corrective actions are expected to be completed by the end of FY 2002. (Also see OIG List of EPA Top Management Challenges.)

4. National Pollutants Discharge Elimination System Permits (Goal 2): The backlog in EPA-issued major permits has tripled over the past 10 years, and the backlog in state-issued permits has doubled over that time. As the universe of NPDES permits expands to cover storm water and concentrated animal feeding operations, the backlog is likely to increase unless additional effort is exerted. The expanding backlog threatens the environment, because expired NPDES permits may not reflect the most recent applicable effluent limitation guidelines, water quality standards, or Total Maximum Daily Loads. EPA headquarters and regional offices are working together closely to track both Agency and state-issued permit efforts. (FY 1998-2000 OIG Management Challenge; declared a material weakness FY 1998.)

Corrective Action Strategy: During the past year EPA's Deputy Administrator sent a memorandum to Regional Administrators directing them to submit a current backlog reduction plan for every state and territory in each region by May 15, 2000. The backlog reduction strategies developed by the regions reaffirm regional and state commitments to meet the Agency's backlog reduction targets. During FY 2000 the backlog of NPDES permits was reduced from 46 percent to 30 percent. EPA expects to eliminate the backlog by FY 2005. (Also see OIG List of EPA Top Management Challenges.)

**5. Construction Grants Close Out (Goal 2):** Without timely closeout of construction grants, millions of dollars in potentially ineligible program costs cannot be recovered for use in other high-priority state clean water projects. (FY 1992 OMB candidate material weakness; declared an Agency weakness FY 1992; elevated to a material weakness FY 1996.)

Corrective Action Strategy: The Construction Grants Completion/Closeout Strategy developed in 1990 required EPA to assess the remaining workload in each region every year, to identify the bottlenecks, and to enter into agreement on a closeout plan and follow-up actions. States are required to submit annual work plans and closeout strategies. The number of open grants has decreased from 5,860 in 1990 to 177 in 2000, and EPA expects to complete corrective actions in FY 2002.

As shown in the accompanying table, EPA has made significant progress over the years to correct integrity weaknesses reported to the President and Congress. Since 1997 the Agency has not reported any new financial nonconformances, which are failures of a financial system to comply with government requirements.

STATISTICAL SUMMARY OF PERFORMANCE								
Material Weaknesses Section 2			Financial Nonconformances Section 4					
	Reported	Corrected	Pending		Reported	Corrected	Pending	
1988- 1996	44	39	5	1988- 1996	18	15	3	
1997	1	3	3	1997	0	3	0	
1998	1	0	4	1998	0	0	0	
1999	0	1	3	1999	0	0	0	
2000	3	1	5	2000	0	0	0	
Total	49	44	5	Total	18	18	0	

### **MAJOR MANAGEMENT CHALLENGES**

This portion of Section III presents a brief description and summary of activities planned in response to 19 management challenges identified by GAO, OMB, OIG, and EPA itself. The Agency will continue to use the tools available under GPRA and other management statutes to assist in addressing these issues. Five of the 19 major management challenges are linked to GPRA goals and measures. Twelve of EPA's management challenges are being addressed as internal Agency weaknesses for which the Agency develops specific and measurable corrective actions and reports on progress to the Administrator.

1. Relationships with States (NEPPS) (Cross-goal, addressed in the "Overview and Analysis"): Under the National Environmental Performance Partnership System (NEPPS), the Agency committed to long-term collaboration with state agencies to improve EPA and state management of national environmental programs. (FY 1999 GAO major management challenge; FY 2000 GAO and OIG major management challenge.)

Corrective Action Strategy: A national EPA-state workshop reviewed evaluations and developed the following recommendations for strengthening NEPPS: (1) recommit to the fundamental principles of NEPPS; (2) coordinate and integrate systems/programs; and (3) improve performance measures. Actions taken in response to these recommendations include reaffirming EPA's commitment to NEPPS; designating "NEPPS Leaders" at the senior management, mid-management, and staff levels; producing a crosswalk of GPRA annual performance measures and NEPPS core performance measures; completing an internal training survey to help strengthen the skills of NEPPS practitioners; and implementing a work plan that commits to developing better tools for NEPPS practitioners. (Also see OIG List of EPA Top Management Challenges.)

2. Safe Drinking Water Information System (SDWIS) (Goal 2): The Agency established SDWIS to serve as the central repository for data on both the states' implementation of and compliance with existing and new drinking water regulations. In 1998 EPA supported a series of data verification audits, the results of which pointed out serious data quality and reliability issues. (FY 1999 OMB candidate material weakness; declared an Agency weakness FY 1999.)

Corrective Action Strategy: EPA is implementing a data reliability action plan developed in 1999 as a multistep approach to improve data in SDWIS. Two important steps completed by the end of 1999 included (1) an industry survey analysis in which water utilities examined and compared data in SDWIS with the utilities' own data, and (2) a study of the variety of ways that states are organized to carry out drinking water program responsibilities and the effects of these organizations on data collection. This effort laid the groundwork for state-specific, on-site training that is expected to enhance and improve the completeness, accuracy, and timeliness of the data in SDWIS. Completion of corrective actions is expected during FY 2001.

3. Water Quality Standards (Goal 2): The Agency must reduce the backlog of actions to approve, disapprove, and promulgate water quality standards. This backlog includes 43 water quality standards from 20 states, one territory, and six tribes that EPA has not yet approved or disapproved, and 23 disapprovals in 15 states that have not been resolved. In addition to the overdue standards there is a backlog of 40 Endangered Species Act consultations with 15 states and two tribes on standards provisions that EPA has approved. Another 16 states, three territories, and eight tribes have not completed triennial reviews in the past 3 years as required by the Clean Water Act. EPA identified these backlogs through routine reporting and program reviews and is concerned that without corrective action the backlogs may grow. (Declared an internal Agency weakness FY 1999.)

Corrective Action Strategy: EPA is employing a twotiered strategy in an effort to eliminate the existing backlog. In the short term EPA is giving high priority to resolving the outstanding disapprovals and unreviewed standards. EPA made considerable progress in FY 2000, reducing both the number of outstanding disapprovals and the number of unreviewed standards. In the longer term the Agency is working to identify and eliminate the problems that have led to the backlogs and other concerns. Completion of corrective actions is expected by FY 2004.

**4. Resource Conservation and Recovery Act (RCRA) Corrective Action Program (Goal 5):** EPA and other stakeholders, including GAO, have identified several factors impeding timely and cost-effective cleanups under

RCRA. To address the problem, GAO recommended that EPA devise a strategy for ensuring that cleanup managers in EPA's regions and states have a consistent understanding of new approaches outlined in guidance or regulation and that EPA oversee program implementation to determine whether cleanup managers are using the new approaches appropriately. (FY 1999 GAO major management challenge; declared an internal Agency weakness FY 1999.)

Corrective Action Strategy: EPA has already undertaken a number of regulatory, guidance, and oversight initiatives consistent with GAO's suggestions. A number of additional actions are planned for the near future and the long term, including providing new results-oriented cleanup guidance with clear objectives; encouraging maximum use of program flexibility and practical approaches through training, outreach, and new uses of enforcement tools; and enhancing community involvement and greater public access to information on cleanup progress. Completion of corrective actions is expected by FY 2001.

**5. Superfund 5-Year Reviews (Goal 5):** Without timely and adequate 5-year reviews Congress and the public are not assured of the continued effectiveness of remedial actions at sites where waste left on site exceeds that allowed for unlimited use of and unrestricted exposure to land where cleanups took place. (FY 1999 OIG major management issue; declared an internal Agency weakness FY 1999.)

Corrective Action Strategy: During the first quarter of FY 2000 EPA established the Superfund Consolidated Accomplishments Plan (SCAP), which targeted for completion 92 5-year reviews due in FY 2000 and 46 of the backlogged 5-year reviews (one-third of the backlog) for a total of 138 reviews. A total of 183 5-year reviews were completed that included 75 reviews due in FY 2000, 69 backlogged reviews, and 39 additional regional reviews. A total of 86 reviews (17 from FY 2000 and 69 of the remaining backlog) are still overdue and are targeted for completion during FY 2001 and 2002, along with the reviews due for each year. Completion of corrective actions is expected by FY 2002. (Also see OIG List of EPA Top Management Challenges.)

6. Superfund Independent Government Cost Estimates (IGCEs) (Goal 5): GAO believes that EPA is too reliant on contractors' own cost estimates and definitions of work in providing cost-reimbursable work

to the Agency. (FY 1997 and 1999 GAO major management challenge; declared an internal Agency weakness FY 1997.)

Corrective Action Strategy: The Agency established a national IGCE workgroup to develop and implement corrective actions to address this issue. The U.S. Army Corps of Engineers conducted in-depth reviews of IGCEs in every EPA region and issued its final report in December 1999, which identified problems and guidance needed. Additional actions taken include sharing best practices for preparing IGCEs and lessons learned, providing additional training to personnel who prepare IGCEs, expanding the review of IGCEs during regional contract reviews, expanding the use of regional databases to provide historical data to be used in IGCE preparation, and standardizing statements of work and baselines for recurring activities. EPA and GAO agree that the Agency should monitor the corrective actions closely and keep IGCEs a high priority. Completion of corrective actions is expected in FY 2001.

7. Superfund Remedial Action Contracts (Goal 5): Routine contract oversight and monitoring activities have found that the percentage of total contract costs expended for program management under response action contracts (RACs) may be too high. (FY 1997 GAO major management challenge; declared an internal Agency weakness FY 1997.)

Corrective Action Strategy: During FY 2000 the Agency continued to take significant steps to increase the capacity utilization of RACs and to contain and minimize program management costs. The most recent quarterly report for actual costs through September 2000 shows that the overall national program management percentage has been reduced to 6.9 percent. This represents a dramatic decrease from September 1999, when the national program management percentage stood at 14.6 percent, and reflects the Agency's continuing efforts to monitor closely and reduce RAC program management costs. Completion of corrective actions is expected by FY 2002.

**8. Great Lakes Program (Goal 6):** The U.S.-Canada Great Lakes Quality Agreement calls for Lakewide Management Plans (LaMPs) and Remedial Action Plans (RAPs) to support the restoration and maintenance of the chemical, physical, and biological integrity of the Great Lakes. At the Agency's request OIG evaluated the Great Lakes Program to provide advice and assistance on how to improve the LaMP and RAP processes and develop

and implement effective national strategies and agreements. (FY 1999 OIG major management challenge.)

Corrective Action Strategy: Agency progress over the past year included implementing a tracking system to address the issues, re-instituting the Great Lakes U.S. Policy Committee to increase attention to RAP issues, and drafting a Great Lakes Strategy that emphasizes goals and measures. In addition the Agency and its partners issued LaMPs for each lake in April 2000. EPA will continue to respond to the need to accelerate RAP progress and complete the Great Lakes Strategy. (Also see OIG List of EPA Top Management Challenges.)

9. Data Management Practices (Goal 7): EPA needs to i rove the management, comprehensiveness, consistency, reliability, and accuracy of its data to help better measure performance and achieve environmental results. In addition, EPA needs to develop error detection processes to ensure that errors in Agency databases are addressed appropriately and in a timely and documented fashion. EPA broadened the scope of an existing internal Agency data management weakness, consolidating Agency efforts to address the multiplicity of issues related to information management, data accuracy, and error correction. (FY 1998–1999 GAO and OIG major management challenge; FY 2000 GAO, OMB, and OIG major management challenge; IRM data management declared an Agency weakness FY 1994; scope of weakness expanded FY 2000.)

Corrective Action Strategy: EPA is working internally and in partnership with the states to improve data management, comprehensiveness, consistency, reliability, and accuracy for better performance measurement and achievement of environmental results. EPA, states, and tribes formed the Environmental Data Standards Council to promote further development and implementation of data standards. Work is under way to develop standards for permitting, enforcement and compliance, tribal identifiers, and geolocational data that are expected to be approved in FY 2001. All six data standards that EPA adopted previously are now being implemented, as appropriate, in Agency information systems, and EPA has engaged the managers of scores of data systems in helping to develop implementation plans. The systems are at varying stages of standards implementation, but all of the thirteen major data systems have completed implementation of at least one of the six data standards, and at least one system has implemented all of the

applicable standards. In addition, as part of its environmental information integration effort, EPA developed a 5-year Integration Management Plan that includes a series of planning documents and specific actions.

To further achievement of shared Agency-state objectives for improving data management integration, EPA collaborated with the states to develop a Network Blueprint that outlines the plans and components required to establish a national network for data exchange of environmental information and defines how it will operate. The components include data standards, data exchange templates, trading partner agreements, a central data exchange infrastructure, a Facility Registry System, and other data registries. EPA is also working to expand implementation of its Integrated Error Correction Process, developed in July 2000. Since that time, 195 errors have been reported, of which 78 have been resolved. (The reporting or allegation of an error does not imply that it is an error. In fact almost 100 data points reported as errors have been investigated and found to be correct.) EPA is also developing a Data Quality Strategic Plan to improve the quality and reliability of environmental data, as well as an Agency-wide Enterprise Architecture that will guide the creation and revision of EPA's programmatic and regional information systems. The Agency anticipates that all corrective actions will be completed by the end of FY 2002. (Also see OIG List of EPA Top Management Challenges.)

### 10. Laboratory Quality System Practices (Goal 7):

Through internal reviews and OIG investigations, the Agency has found management control weaknesses and some cases of misconduct in laboratories concerning data quality that could impact environmental and enforcement decisions. (FY 1999–2000 OIG major management challenge; declared an internal Agency weakness FY 2000.)

Corrective Action Strategy: EPA completed independent technical reviews of its regional laboratories in FY 2000 to assess the Agency's ability to produce data of known and documented quality. The Agency will complete reviews of the remaining laboratories by the end of FY 2001. Ongoing actions include assembling a workgroup consisting of both EPA and non-EPA members that will (1) identify weaknesses in laboratory quality systems that produce analytical data used for Agency decision making; (2)

establish methods to detect and deter misconduct in labs; and (3) promote best practices in laboratory performance, documentation, and implementation. In addition each EPA organization will be responsible for establishing management controls to ensure that environmental measurement data supplied by laboratories is of known and documented quality. This effort includes monitoring and oversight of the development and implementation of Agency-approved quality systems by third parties. Completion of corrective actions is expected by December 2003. (Also see OIG List of EPA Top Management Challenges.)

11. Results-Based Information Technology Project Management (Goal 7): EPA and its partners need to plan strategically for implementing a common data architecture, data standards, geospatial information, and one-stop electronic reporting in order to share environmental information with EPA's diverse partners and stakeholders and facilitate environmental protection efforts. In addition the Agency needs to ensure that information technology projects are timely, cost-effective, and results—based. (FY 2001 OIG major management challenge.)

Corrective Action Strategy: EPA has already begun to address the systemic issues of information technology project planning and management. For example EPA's environmental information integration effort provides a new approach to state—data relationships and new technologies. Over the next few years EPA plans to develop a more robust and rigorous program to meet the architectural and investment management requirements of the Clinger—Cohen Act. As part of this effort EPA plans to expand its project management review criteria for projects with annual costs greater than \$1 million or more than \$5 million over the life-cycle of the system to ensure greater accountability and capability to produce results. (Also see OIG List of EPA Top Management Challenges.)

12. Reinventing Environmental Regulation (Goal 8): In January 1999 GAO reported that EPA's current regulatory system is costly and occasionally inflexible and that the Agency faces challenges in making changes to the current system. These challenges include helping employees understand and support changes and reaching consensus among stakeholders on objectives and approaches for addressing important reinvention issues and policies. (FY 1999–2000 GAO major management challenge.)

*Corrective Action Strategy:* Efforts are under way to achieve better environmental results with less burden through the use of innovative and flexible approaches. Actions taken to date include:

- Reorganizing the Agency's policy and reinvention staff into one organization focusing on innovation, economic analysis, and support for business and community environmental approaches.
- Building Agency capacity for evaluating innovative policies and approaches.
- Finalizing 50 Project XL (eXcellence and Leadership) agreements, continuing follow-through on XL and state innovation projects, and implementing an annual cycle of evaluation for Project XL pilots.
- Initiating the Performance Track Program to recognize high-performance companies.
- Establishing regular forums and networks with small businesses and industrial sectors.
- 13. Permit Compliance System (PCS) (Goal 9): OMB believes that, because of missing data and data quality problems, PCS is not a reliable source of information for the management and oversight of the Clean Water Act NPDES program. (FY 1999 OMB candidate material weakness; declared an internal Agency weakness FY 1999.)

Corrective Action Strategy: EPA has been aware of problems with PCS and, over the past few years, has worked with the states to identify problems and define the systems revisions needed for effective NPDES program management and oversight. In conjunction with the states, EPA has three major initiatives under way that are intended to improve the usefulness of the system as a management tool: PCS modernization, interim data exchange format, and electronic reporting. EPA is monitoring progress carefully and will gauge success by the level of state participation, improvements in the quality and comprehensiveness of the data, and reliability of the analyses generated. Completion of corrective actions is expected by FY 2003.

**14. Accountability (Goal 10):** OIG describes this major management challenge broadly to encompass the Agency's planning, budgeting, and accountability functions overall and points specifically to issues related to managerial cost accounting, performance partnership agreements, and the Great Lakes Program. (FY 1997–2000 OIG major management challenge.)

Corrective Action Strategy: EPA has made significant progress over the past few years in strengthening resultsbased management, including development of a goalbased budget and planning and accountability functions to support it. In FY 2000 EPA issued its revised Strategic Plan for FY 2000-2005 that reflects lessons learned about performance measurement and Agency priorities for protecting the environment and human health, improved performance measures to reflect better programmatic and environmental outcomes, and strengthened cost accounting to link more clearly Agency budgetary resources with the achievement of environmental results. It must nevertheless be kept in mind that the resources identified with a particular environmental outcome will rarely, if ever, fully capture the relevant costs. For example, the Great Lakes program benefits greatly from work done in other programs, including overall water quality protection and the acid rain program. Since resources cannot be double-counted, such omissions are inevitable. (Also see OIG List of EPA Top Management Challenges.)

15. Agency Process for Preparing Financial Statements (Goal 10): According to OIG, EPA's process for preparing financial statements needs improvement to enable the Agency to submit audited financial statements by March 1 of each year. (FY 1999–2000 OIG major management challenge; declared an internal Agency weakness FY 1999.)

Corrective Action Strategy: In an effort to deliver timely financial statements and obtain clean audit opinions by March 1, 2001, EPA has issued policies and procedures on the Agency's financial statement preparation process, prepared interim financial statements, reached agreement with OIG on the timeline for key milestones, established formal controls with OIG to address audit questions and adjustments, and provided technical training to staff responsible for financial statements. In addition, the Agency is examining options for automating the preparation of statements. Completion of corrective actions is expected in FY 2001, and OIG has issued an unqualified opinion on the Agency's FY 2000 statements.

16. Managerial Cost Accounting (Goal 10): OIG believes that EPA needs to improve its cost accounting systems and processes to provide Agency managers with timely and reliable information on the cost of carrying out EPA's programs and administrative activities. In the Agency's FY 1999 financial statement audit, OIG

reported that EPA did not comply with the Managerial Cost Accounting Standard requirements to (1) determine the full cost of its activities, (2) accumulate and report on a regular basis the cost of activities for management information and other stakeholder purposes, and (3) use appropriate costing methodologies to accumulate and assign costs to outputs. (FY 2000 OIG major management challenge.)

Corrective Action Strategy: EPA believes that it substantially complies with the Managerial Cost Accounting Standards. Since FY 1999 all new obligational authority has been budgeted and accounted for in the Agency's GPRA 10-goal structure using a Program Results Code (PRC). The PRC provides the structure whereby all the costs that benefit the activities in a particular goal and objective, regardless of national program manager or program office, are accumulated to show the cost of the Agency's outputs. Some indirect costs are accumulated in distribution accounts and allocated to the appropriate PRC. Obligations made before FY 1999 are accounted for in the old program element structure. Cost information from both accounting structures is available for use by managers to review how resources are spent to achieve expected results and to help them make future budgeting decisions.

Cost accounting is a process that will continue to evolve as a result of on going improvements and enhancements. EPA has taken a number of actions and has planned others to strengthen cost accounting further. The Agency has:

- Linked resources in the Annual Plan and Budget with the GPRA goal structure, beginning with FY 1999.
- Issued policy and guidance and provided training on budget restructuring and cost accounting.
- Issued Superfund indirect cost rates that comply with the Managerial Cost Accounting Standards.
- Issued the FY 2000 Statement of Net Costs by goal in the Agency's Annual Financial Statements.
  - The Agency is currently:
- Developing reports on outputs that combine both the old and new structure.
- Working with individual program offices to address specific accounting needs.

Assisting programs in developing indirect costs for user fees.

(Also see OIG List of EPA Top Management Challenges.)

17. Improved Management of Assistance Agreements (Goal 10):OIG audits have found that EPA needs to validate the effectiveness of its strategy for ensuring effective management of its assistance agreements. (FY 2000 OIG major management challenge; grants closeout and oversight of assistance agreements was declared a material weakness in FY 1996, reported substantially corrected in FY 1999 and redesignated as an internal Agency weakness; grants closeout was corrected in FY 2000; and improved management of assistance agreements was declared an internal Agency weakness in FY 2000.)

Corrective Action Strategy: The Agency closed the grants closeout portion of this weakness in FY 2000, reporting that all but 26 grants of the estimated backlog of 19,000 reported to Congress in July 1996 were closed. Twenty-four of the remaining 26 grants will be closed out as the Agency resolves an outstanding indirect cost rate issue. The remaining two grants will be closed out as the Agency completes the audit resolution process. To manage grant closeouts more efficiently, EPA has established interim closeout goals for each year. Each Grants Management Office submitted its FY 2000 grants closeout strategy as required. In addition the Agency developed and implemented policies to ensure effective post-award management of EPA assistance agreements.

During FY 2001 EPA will assess whether the Agency manages its assistance agreements appropriately, both administratively and programmatically. The Agency will examine quarterly reports and information from the Grantee Compliance Assistance Database; conduct evaluations of Management Effectiveness Reviews, post-award plans, and the Grantee Compliance Assistance Initiative; and consult with Senior Resource Officials in conducting the assessments and with OIG to validate corrective actions. Completion of corrective actions is expected by FY 2002. (Also see OIG List of EPA Top Management Challenges.)

18. Human Capital Strategy Implementation (Goal 10): EPA must devote considerable attention to building a workforce with the highly specialized skills and knowledge required to accomplish the Agency's work or risk seriously weakening its ability to fulfill even the most basic of its legal, regulatory, and fiduciary

responsibilities. With its Human Capital Strategic Plan in place, the Agency has a blueprint for the initial and longer-term steps needed to begin addressing this impending weakness. (FY 1998–1999 OIG major management challenge; FY 2000 GAO and OIG major management challenge; declared an internal Agency weakness FY 2000.)

Corrective Action Strategy: The Agency's workforce planning efforts call for identifying the skills needed in every program unit based on an assessment of future program needs, determining the gap between those needs and the current state, and tying those needs to future budget development. Developmental programs aimed at support staff, mid-level professionals, managers, and the Senior Executive Service (SES) are being implemented or are in final design. The first SES Candidate Development Program to be offered in more than a decade will begin this spring. Completion of corrective actions is expected by FY 2003. (Also see OIG List of EPA Top Management Challenges.)

19. Performance Partnership Grants (PPG) (Goal 10): During regional audits on PPGs, OIG found that (1) Agency officials had difficulty determining how to provide flexibility while ensuring accountability for performance and environmental results; (2) some PPGs did not include quantifiable, verifiable, measurable, and time-specific measures; and (3) some PPGs included activity-based measures rather than outcome-based measures. OIG concluded that EPA and states have not been able to redirect scarce resources to improving environmental results and that the lack of goals and performance measures contributed to the poor integration of NEPPS. OIG believes that greater integration and acceptance of NEPPS in the Agency, combined with meaningful performance measurement, would result in rapid environmental improvements. (FY 1997 OIG issue addressed as part of management challenge on accountability.)

Corrective Action Strategy: Following the promulgation of regulations to establish the PPG program for states and to add a new regulation specifically for Indian tribes, EPA is working to implement and provide training on the state and tribal PPG regulations. The Agency anticipates publishing the final rules in FY 2001, pending concurrence from OMB. In addition EPA will include PPGs in its administrative Management Oversight Reviews. Completion of corrective actions is expected in FY 2001.

### MANAGEMENT'S REPORT ON AUDITS

During FY 2000 EPA made significant progress in reducing the number of audits without final action as well as strengthening its audit management practices Agency-wide. EPA reduced the number of audits without final action after 1 year by 35 percent, from 62 in FY 1999 to 40 in FY 2000. Overall, EPA was responsible for addressing OIG recommendations and tracking follow-up activities on 503 audits in FY 2000. The Agency achieved final action on more than half of these audits within 1 year.

In addition to strengthening Agency-wide audit follow-up activities for promptly addressing audit issues, EPA began to develop a new web-based system to improve its efficiency in audit management practices. The Agency plans to implement the new system in FY 2001. EPA continues to work with OIG and senior managers to emphasize the importance of timely and effective audit management practices. Following is a

summary of the Agency's audit management activities for FY 2000.

Final Action Taken: EPA achieved final action on 32 performance audits and 244 financial audits. Of the 244 financial audits, OIG questioned costs of more than \$59.6 million. After careful review OIG and the Agency together agreed to disallow \$29.8 million of these questioned costs. For this period EPA management and OIG did not identify audits for which resources could be better utilized (that is, put to better use) based on findings in a performance audit.

**Final Action Not Taken:** As of September 30, 2000, 227 audits were without final action (excluding those audits with management decisions under administrative appeal by the grantee). Of these 227 audits, EPA officials had not completed final action on 40 audits (18 percent) within 1 year after the management decision.

DISALLOWED COSTS AND F	Disa	O BETTER USE  llowed Cost ncial Audits)	Better Use (Performance Audits)		
Category	Number	Value	Number	Value	
Audits with management decisions but without final action at the beginning of FY 2000 <sup>1</sup>	196	\$166,793,646	57	\$0	
Audits for which management decisions were reached in FY 2000	228	\$ 23,263,486	22	\$0	
Total audits pending final action during FY 2000	424	\$190,057,132	79	\$0	
Final action taken during FY 2000:  (i) Recoveries    a) Offsets    b) Collection    c) Value of Property    d) Other  (ii) Write-Offs (iii) Reinstated Through Grantee Appeal (iv) Value of recommendations completed (v) Value of recommendations management decided should/could not be completed	244	\$ 29,811,957 \$ 18,182,932 \$ 4,142,067 \$ 0 \$ 191,000 \$ 5,375,496 \$ 1,920,462	32	\$0 \$0 \$0	
Audits without final action at end of FY 2000	180	\$160,245,175	47	\$0	

<sup>&</sup>lt;sup>1</sup> Differences in number of reports and amounts of disallowed costs and funds put to better use between this report and our previous semiannual report result from adjustments made to follow-up data in the tracking system.

Audits Awaiting Decision on Appeal: EPA regulations allow grantees to appeal management decisions on financial assistance audits that seek monetary reimbursement from the recipient. In the case of an appeal, EPA must not take action to collect the account receivable until the Agency issues a decision on the appeal. As of September 30, 2000, there were 74 management decisions in administrative appeal status.

Audits Pending Final Action Beyond 1 Year: Due to the complexity of the issues, Agency management often requires longer than 1 year to complete corrective action on audits conducted by OIG. Beginning October 1, 2000 management will track 40 audits with outstanding corrective actions after the 1-year period. These audits are discussed below by category—contracts, single audits, assistance agreements and program performance—and identified by title and responsible office.

Contracts: Final action for contract audits occurs when the contract is awarded, the solicitation is canceled, repayments to EPA are received, or corrective actions are implemented. EPA is tracking completion of one audit taking longer than 1 year to complete.

Office of Acquisition Management: 10040 CMC, Inc.

Single: Single audits are those that affect nonprofit organizations, universities, and state and local governments. Final action for single audits occurs when nonmonetary compliance actions are completed. This process may take longer than 1 year to implement if the findings are complex or if the grantee does not have the resources to take corrective action. EPA is tracking completion of corrective actions on three single audits.

### Region 9:

85018 Arizona

85053 Colorado River Indian Tribes, Arizona85059 Colorado River Indian Tribes, Arizona

Assistance Agreements: Final action for assistance agreement audits occurs when all corrective actions have been implemented. Final action may take longer than a year because the grantee may appeal, refuse to repay, or be placed on a repayment plan that spans several years. EPA is tracking 11 audits with financial or associated corrective actions taking longer than 1 year to complete.

### Region 3:

12023 Bath County Service Authority

20207 Center for Environment, Commerce Engineering

Region 4:

73023 Atlanta, Georgia

Region 7:

13038 Metro St. Louis Sewer District

### Region 5:

13084 Strongsville, Ohio

13115 Galion, Ohio

14038 Gary, Indiana

14042 Cass County, Michigan

14047 Indianapolis, Indiana

24077 Gary, Indiana

34038 Flint, Michigan

Program Performance: Program performance audits include reviews of Agency programs and audits of EPA's financial statements. Final action for program performance audits occurs when all corrective actions have been implemented. This process may take longer than 1 year when corrections are complex and lengthy. EPA is tracking 25 audits in this category.

### Office of the Administrator:

61301 Environmental Education

71277 Regional Labs Office of

Environmental Information:

51240 PCIE Application Maintenance

81240 Field Sampling Capping Report

Office of the Chief Financial Officer:

21660 Superfund FY91 Trust Fund

81058 FY 1997 Financial Statement

81166 FY 1997 Financial Statement

### Office of Prevention, Pesticides, and Toxic Substances:

11378 Pesticides Inerts

34030 Pesticides Banned (follow-up)

41205 Pesticides Theme Report

Office of Research and Development:

P0217 Selection of Peer Reviewers

Office o 71142 71223	
	f Solid Waste and Emergency Response:
51512	Manifesting Requirements
71114	Audit of RCRA Hazardous Waste Data
71132	Lab Data Quality - Federal Facilities
81090	Replacement Housing
81234	Audit of Deferrals to States
Region 5	;:
10058	Tribal Water Grants
P0055	RCRA SIG Non-Compliers
P0210	Ohio Water Quality
P0212	GLNPO
Region 9	):
83004	Physical Environmental

Air Enforcement Program, Washington

Region X LANS

Region 10: 81094

81252

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### MAJOR MANAGEMENT CHALLENGES NEEDING HIGH-LEVEL AGENCY ATTENTION (Prepared by EPA's Office of Inspector General)

#### **ACCOUNTABILITY**

EPA's stated mission is to protect human health and safeguard the environment. Accountability, a critical part of the Agency's overall system, is needed for EPA to accomplish its mission effectively. Over the years OIG has recommended improvements in a number of areas that will help EPA achieve greater accountability. However EPA needs to take further action to develop accountability systems that tie performance to the Agency's organizational goals.

EPA can be viewed as a business which must endeavor to deliver high quality products and services to its customers. To do this EPA needs to integrate its management systems better. These systems encompass leadership to define the Agency's mission, values, and products; strategic planning to establish goals and measures of success; customer focus to ensure expectations are met; management information systems to report progress in achieving goals; streamlined work processes; and effective human capital management. These components should all work together so that EPA can meet customer needs and achieve desired environmental and business results.

EPA was consciously organized with ten largely autonomous regional offices so that the Agency could be more sensitive to local environmental concerns. With this organizational structure it is very important that regional offices be held accountable for implementing national environmental policies. Resources budgeted for environmental programs by EPA Headquarters should be controlled and accounted for to ensure they are used for designated purposes. This can be achieved through clearly defined goals, performance measures, and areas of responsibility; better tracking of how employees spend their time; and greater commitment to achieving national goals.

EPA needs to work with its state, tribal, and federal agency partners to identify roles and responsibilities for carrying out environmental protection. For example, in work on the Great Lakes Program, we found that plans to address the Great Lakes ecosystems would benefit from clarifying the organizational roles and responsibilities for the offices, divisions, and teams involved. Another example is the 1998/1999 RCRA

Implementation Plan, which did not include specific expectations regarding basic permit program maintenance. Clarification of roles and responsibilities for this program would establish accountability and help the program achieve success.

The availability of management information also greatly impacts accountability. EPA needs to work with its partners to identify and agree on what data is needed to measure the health of the environment and assess progress. As further discussed under the information resources data management weakness, the Agency has a number of ongoing activities to improve the quality and availability of its environmental data; however, it is unlikely EPA will have the foundation it needs to share comparable information, monitor environmental activities, or compare progress across the nation in the near future.

# RESULTS-BASED INFORMATION TECHNOLOGY PROJECT MANAGEMENT

As the Agency looks to its future it is increasingly apparent that EPA has not adequately planned an information technology (IT) infrastructure to support an integrated approach to managing environmental information. To facilitate improvements in environmental protection EPA needs to provide and share environmental information with its diverse partners and stakeholders. To achieve that goal EPA and its partners need to plan strategically for implementing a common data architecture, data standards, geospatial information, and one-stop electronic reporting. Although EPA has initiated numerous IT projects in recent years, they were not evaluated to assess how they support the Agency's programmatic and operational goals. In the last 2 fiscal years, EPA has dedicated approximately \$822 million to IT projects. The Agency expects it will spend at least \$472 million in FY 2001. To ensure projects are timely, cost effective, and results-based, it is imperative that EPA better plans, develops, approves, and manages its IT projects.

We have significant concerns regarding the current structure of EPA's investment process and the Agency's ability to track IT development and implementation effectively. For several years EPA has attempted to address these problems but has been unable to craft an adequate project management process for IT capital investments that will enable the Agency to support its environmental mission. Instead EPA appears to have an evolving approach to integrating information using existing IT projects, which in themselves have not incorporated reasonable project management controls. This approach has resulted in many stops and starts over the last several years and does not meet the intent of the Clinger-Cohen Act of 1996. The Act requires a comprehensive approach to capital planning and a disciplined budget process for managing a portfolio of assets to meet Agency goals and objectives.

Our concerns regarding the lack of IT project management at EPA are echoed in the special report, Federal Agency Compliance with the Clinger-Cohen Act, issued by the Senate Governmental Affairs Committee. This report noted that EPA could produce no evidence of mission-related reviews or assessments regarding IT projects that discussed programmatic or operational goals. EPA's own 1999 analysis of 49 major IT investment proposals found that:

- Project milestones were too general, nonmeasurable, and not tied to key life-cycle milestones.
- Projects were still being planned, developed, and managed in a stovepipe fashion.
- EPA had not established Agency-wide priorities for IT investments.
- EPA's Information Resources Management Strategic Plan was outdated and did not track with the Results Act.

EPA created the Office of Environmental Information (OEI) 2 years ago to consolidate many information technology operations. While well-intentioned, OEI has not formalized a long-term implementation strategy for providing the Agency with a multimedia approach to accomplish its various programmatic missions.

#### **DATA MANAGEMENT**

Audits of EPA programmatic areas often cover areas relating to environmental data information systems, and we frequently find deficiencies within these systems. States have developed information systems based on the information they need to support their

environmental programs. EPA and the states often apply different data definitions within their respective information systems and sometimes collect and input different data. As a result states and EPA report inconsistent data and often have difficulty sharing comparable information. EPA has attempted to address data quality issues such as data gaps, but, to date, has not produced an approved action plan. Consequently EPA may not have the environmental data it needs to monitor environmental activities or compare progress across the nation.

For many years EPA has acknowledged data management as an internal Agency weakness. In particular it has recognized the need to implement (1) a data architecture, (2) data standards, and (3) data administration functions to share environmental data Agency-wide and with EPA's partners and stakeholders. Developing a data management program has been a complex effort and, consequently, corrective action dates have been extended several times since the problem was first reported in 1994. The Agency's estimated date to correct this Agency weakness is now FY 2002.

Several areas remain to be addressed. First EPA committed to publish a data architecture by December 1996. The Agency stated that it completed the corrective action in May 1999, but it has been unable to produce evidence of a publication for our review. Second EPA initiated action to promulgate six data standards by June 1996. Although the standards have been formally approved, they have not been implemented in the Agency's major environmental systems. Third EPA agreed to revise policies and procedures by March 1997, and although this action was reported complete in May 1999, the revised policies have not been approved or implemented. Using the data standards and revised procedures, EPA stated that a functioning management structure would be operational by September 1998. EPA's Environmental Data Registry and Facility Registry System (FRS) were to form the backbone of the management structure. However it will be FY 2001 before FRS is fully loaded and functioning.

In 1999 EPA formed OEI to increase the value of environmental information for all stakeholders by systematically improving interagency data sharing, as well as the accuracy, reliability, and scientific basis of environmental information. The Administrator also established an Information Integration Initiative (I-3)

focused on establishing a single integrated multimedia core of environmental data and tools. After 1 year the I-3 project still does not have an approved action plan to coordinate current and future efforts.

OEI recognizes that much needs to be done to realize EPA's vision of integrated, quality environmental information and expects to develop a long-term approach and implementation schedule for improving the quality and reliability of the Agency's environmental data. To that end OEI will continue to develop data management policies and procedures and work on promulgating existing data standards. Moreover, through the recently-established Environmental Data Standards Council, EPA will work with states and tribes to identify and develop the next set of data standards. OEI is also continuing to develop and expand implementation of its integrated error correction process to improve the reliability of collected environmental data. Finally, in FY 2000, EPA began to plan a comprehensive data exchange network which, through the use of current technology, will provide a wide range of shared information among EPA, states, tribes, localities, the regulated community, and other data partners.

Although the Agency is moving in the right direction, it has not developed an overall strategy to address the integration, quality, and management of its environmental data. To help the Agency achieve success in these endeavors, we shared thoughts with EPA's Chief Information Officer regarding the Agency's strategy and planned activities for I-3 and the proposed exchange network. At this point it is unlikely that EPA will have the foundation it needs to share comparable information, monitor environmental activities, or compare progress across the nation within the near future. Moreover EPA's ability to evaluate the outcomes of its programs in terms of environmental changes will continue to be limited by gaps and inconsistencies in the quality of its data.

#### MANAGERIAL ACCOUNTING

During the audit of the FY 1999 financial statements we reported that the Office of the Chief Financial Officer (OCFO) needed to further improve its systems and processes to increase the accuracy, reliability, and usefulness of financial information used to prepare the financial statements and to manage EPA's

environmental programs and administrative activities. Because of Agency process problems, reliable FY 1999 financial statements were not prepared to enable an unqualified audit opinion by March 1, the date required by the Government Management Reform Act. Although EPA improved its financial preparation processes over prior years, the financial statements provided for FY 1999 were incomplete, contained significant errors, and were received late. The Agency has recently made some process improvements. OIG's assessment of the impact of the improvements on EPA's financial reporting capabilities will not be completed until late February 2001.

EPA has been recognized as a leader in developing a goals-based budget aligned with its programmatic and operational outputs and outcomes. EPA needs to follow through and improve its cost accounting systems and processes, so Agency managers have timely and reliable information on the cost of carrying out EPA's programs and administrative activities. The lack of cost information adversely impacts nearly every facet of EPA's operations, from budget formulation and planning, to program execution and evaluation, to the recovery of EPA's costs to provide services to others. During the FY 1999 financial statement audit we reported that EPA did not comply with the Managerial Cost Accounting Standard requirements to (1) determine the full cost of its activities, (2) accumulate and report the cost of activities on a regular basis for management information and other stakeholder purposes, and (3) always use appropriate costing methodologies to accumulate and assign cost to outputs. We also plan to report this noncompliance for FY 2000. OCFO disagrees that its cost accounting system is noncompliant with the required standard, but agrees that improvements should be made to the system over time.

A critical component of a good cost accounting system is the indirect cost rate. An Agency-wide indirect cost policy is needed to help ensure that direct and indirect costs are consistently identified for inclusion in determining the full cost of conducting Agency programs and activities, including cost per output. EPA's indirect cost policy should identify what costs should be included to recover full cost when determining user fees for programs that receive fees for services provided by EPA and when developing billing rates for work EPA performs for other government agencies.

Although progress has been made in developing and implementing cost accounting procedures, more needs to be done. Strong leadership from OCFO and a commitment by all Agency offices is needed for EPA to have systems and procedures in place to provide useful, consistent, timely, and reliable information about the cost of EPA's programs and outputs. Agency managers need cost data integrated with program information to make the best decisions about how to use available resources to maximize environmental results. For example, with information about the transactional cost of various approaches to achieving an environmental outcome, Agency managers could make comparisons and select the most cost-effective approach to achieving the desired environmental result. The development of sound cost accounting information will also promote greater accountability within the Agency.

#### **EMPLOYEE COMPETENCIES**

The Agency recognizes one of its biggest challenges over the next several years is the development and implementation of a workforce planning strategy that focuses its attention and resources on employee development. Appropriate training for staff, including supervisors and managers, is critical to accomplishing EPA's environmental mission. The need for training is highlighted in a number of OIG audit reports.

In an audit of the Superfund program, we reported that the Headquarters program office and several EPA regions did not clearly identify the quality assurance training needs of program staff. Even in regions where training needs were identified, the training was not always provided. Also audits have repeatedly noted a need to better train managers in their oversight and administration of EPA's assistance agreements programs. As a third example we found that EPA employees in the hazardous waste program needed more rigorous training to calculate proposed penalties against violating facilities.

NEPPS is a major EPA-state program. We found that a lack of training for EPA employees has hindered the effective implementation of NEPPS. This training is important because the NEPPS program is fundamentally different from traditional EPA programs in that it allows the states greater flexibility in achieving environmental results. Therefore it is critical that EPA

and the states work closely together to agree on expectations and measurements.

EPA also recognizes the need for broader management and leadership skills. This need is clearly expressed in the Workforce Assessment Project that reported on the implications of future changes in EPA's mission and role in environmental protection. The study identified competency gaps that EPA must close to ensure its workforce can meet existing and new challenges. GAO also reported EPA's need to develop and implement a workforce planning strategy. EPA drafted a Human Capital Strategic Plan. EPA's workforce planning efforts call for identifying the skills needed in every program unit based on the Agency's assessment of future program needs, identifying skill gaps, and tying skill needs to future budget requests. The Agency needs to make a commitment to deploy the strategy by dedicating resources, developing performance measures, and implementing necessary systems.

#### **QUALITY OF LABORATORY DATA**

High quality scientific analysis is critical to the accomplishment of EPA's mission. The quality of some scientific analyses generated by EPA and contract laboratories is questionable and should not be used to support environmental decisions. Our reviews disclosed weaknesses and fraud in laboratory management practices resulting in data quality and integrity problems that impact environmental and enforcement decisions.

EPA relies on the testing data provided by contract laboratories to assess threats to public health and the environment and to determine where and when remedial action is needed. In September 2000 employees at one EPA contract laboratory were indicted for falsifying data involving sample analyses for several EPA program areas including Superfund, RCRA, NPDES, air toxics, and pesticides. At another contract laboratory key employees were convicted for falsely certifying that gas chromatograph/mass spectrometer analyses on samples taken from hazardous waste sites nationwide complied with all EPA contract requirements. EPA is spending significant resources to determine the impact of fraudulent analyses on environmental and enforcement decisions.

OIG work at an EPA laboratory disclosed several problems with the quality of analytical results and chain

of custody procedures. An internal EPA review also identified numerous weaknesses in laboratory management practices. OIG recommended various actions for improving management, accountability, and oversight of the laboratory, including independent technical reviews. The Agency has responded to these recommendations and deployed technical review teams around the country. The Agency also plans to take long-term measures to ensure management controls are in place to assure that environmental data generated by both EPA and non-EPA laboratories meet the Agency's quality needs and requirements.

#### **EPA'S INFORMATION SECURITY PROGRAM**

EPA relies on its information systems to collect, process, store, and disseminate vast amounts of information used to assist in making sound regulatory and program decisions. We believe EPA needs a centralized security program with strong oversight processes to adequately address risks and ensure that valuable IT resources and environmental data are secure. With a decentralized wide area network that links all of EPA's computer systems, even one regional location with an inadequate security program can make the entire Agency vulnerable. Similarly weaknesses surrounding EPA's key environmental and financial systems could jeopardize the integrity of vital data for decision making and public use.

We found significant and pervasive problems regarding the adequacy of security for EPA's financial systems and various regional operations. We recently reported that controls over entry to EPA's mainframe computer at RTP needed strengthening. Also in July 2000 GAO reported serious problems with EPA's security program and spotlighted unacceptable security risks by penetrating numerous systems. GAO also reported that Agency security plans were inadequate and added that existing practices were largely a paperwork exercise that did little to mitigate risks to Agency data and systems. In response to GAO's findings EPA initiated a number of aggressive steps to enhance and improve its information security program. For example, the Agency temporarily shut down much of EPA's IT communications with its partners and stakeholders until critical controls could be established.

Despite many notable actions OEI is only beginning to establish its security oversight role for EPA's vast information system network. Moreover OEI

is just starting to take needed steps to enhance and institutionalize an expanded information security program. In addition, although EPA has installed firewalls, no final network security policies exist regarding Agency Internet networking controls or dialup access. EPA recently developed an Agency Information Security Action Plan which uses a phased approach to address GAO and prior OIG report recommendations. EPA expects it will take 2 years to implement the expanded Agency security program and to address the related action plan recommendations.

In the interim, we believe the Agency should continue to concentrate resources on this significant weakness, ensuring that all aspects of an Agency-wide information security program are addressed. This includes not only adequate security plans, but also the process used to develop those plans and the hardware tools and policies that EPA must implement to enforce security throughout the Agency. For example management needs formally to approve and implement final network security policies using appropriate firewall(s) technology. Moreover we recommend that EPA thoroughly verify the effectiveness of implemented controls before concluding work in this crucial area.

# EPA'S USE OF ASSISTANCE AGREEMENTS TO ACCOMPLISH ITS MISSION

Assistance agreements are the primary vehicles through which EPA delivers environmental and human health protection to the public. Therefore it is important that the Agency and the public receive what the Agency has paid for. For many years funding of assistance agreements has constituted approximately one-half of the Agency's budget.

Agency managers have been working to improve their management of assistance agreements. However our audit work continues to identify problems in the delivery of environmental protection activities through the award of assistance agreements. For example we reported in September 2001 that EPA Region 8 was not consistently awarding and monitoring tribal grants. Agency officials placed a higher priority on external relationships, generally with the tribes, and did not pay sufficient attention to grant management and internal organizational relationships. Some grants included

unallowable activities or EPA received inadequate or untimely work plans and progress reports from grantees.

Recent OIG audits of EPA's assistance recipients disclosed that some recipients did not have adequate financial and internal controls to ensure federal funds were managed properly. As a result EPA had limited assurance that assistance agreement funds were used in accordance with workplans and met negotiated environmental targets. For example an EPA Region 5 grantee could not adequately account for almost \$169,000 of the \$300,000 in EPA funds. As another example a Region 2 grantee had submitted multiple financial status reports with different ending balances, had excess federal funds on hand, and could not support that it had met the minimum cost-sharing requirement. Misuse of assistance agreement funds also resulted in an agreement with one city to settle a civil lawsuit charging that the city's air pollution control program improperly spent a total of \$429,158 in assistance agreement funds awarded by EPA.

The Agency has completed a number of actions to improve its management controls over assistance agreements. OIG will continue to conduct audits to determine if systemic problems exist in EPA's management of assistance agreements and to work with the Agency to identify solutions.

# BACKLOG OF NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMITS

EPA has recognized that the backlog in issuing NPDES permits is a nationwide problem. In 1998 OIG conducted audits in three states to assess the extent of permit backlogs. EPA had not issued or renewed most of the required permits for municipal and industrial dischargers in Alaska and Idaho. Although Region 10 issued 33 permits in 2½ years, there were 1,000 applications waiting to be processed of which 70 percent were more than 4 years old at the time. As a result large numbers of dischargers were operating without permits or had their permits administratively extended without being subjected to more current and stringent discharge requirements. Also we found Kansas did not reissue expired wastewater facility permits in a timely manner and did not submit expired permits to Region 7 for review. As a result the permitees may have been allowed to discharge pollutants at levels that could adversely affect human health and aquatic life.

EPA reports that the backlog in EPA-issued major permits has tripled over the last 10 years and the backlog of state-issued permits has doubled over this time. EPA's Office of Water developed a corrective action plan to address this weakness. Originally EPA expected to complete corrective action by 2004; however, the completion date has since been delayed to 2005. The Agency's "Clean and Safe Water" goal for FY 2001 addresses the NPDES permit backlog.

While reducing the NPDES backlog is important, EPA needs to realize that its current permitting system will probably never allow for complete backlog elimination. Accordingly EPA needs to identify those areas where permitting will result in the greatest environmental payback and permit those areas first. We will continue to monitor the progress EPA makes in addressing this important issue.

# EPA'S WORKING RELATIONSHIP WITH THE STATES

During the last two decades environmental and human health protection programs have grown in size, scope, and complexity. Many environmental problems transcend media boundaries and solutions may require innovative, cross-media approaches. EPA and states came to recognize that existing arrangements for implementing environmental programs and addressing environmental problems were not as efficient and effective as they could be. NEPPS established a new framework to reinvent the EPA-state working relationship so that the focus is on trying to work as partners to accomplish very complex environmental issues with scarce resources. EPA began implementing PPGs in 1996 that allowed states and tribes to combine multiple EPA grants into one grant. PPGs are important tools for implementing NEPPS and share many of the same objectives as NEPPS.

A series of OIG audits on regional and state NEPPS and PPG program implementation found that NEPPS was not well-integrated into EPA because of the lack of (1) leadership to provide clear direction and set expectations, (2) training and guidance, (3) trust in NEPPS due to fear of change and losing control, and (4) goals and related performance measures to monitor and measure progress on achieving better environmental results. EPA can help increase NEPPS/PPG success by providing training and establishing a more collaborative, action-oriented process for

establishing goals, defining EPA and state roles and responsibilities, agreeing on measures to assess environmental progress, and obtaining commitments for results to be achieved.

EPA had not clearly established a central authority or responsibility for NEPPS, and senior EPA management had not clearly communicated its expectations about NEPPS and PPGs. EPA staff often did not know where to turn for specific information on direction, expectations, and clarification. NEPPS was perceived by EPA staff as a policy that was implemented only if a state and EPA wanted it and that, even then, allowed the state to choose the NEPPS components in which it wanted to participate.

The lack of clear goals, guidance, and training has resulted in many EPA managers and staff having little direction and lacking the skills needed to use NEPPS effectively to carry out their environmental programs. NEPPS created a great deal of concern among some EPA managers and staff who believed NEPPS could eliminate program and financial accountability. EPA and states have not yet agreed on how to provide flexibility to states along with accountability. EPA and state managers struggled with how to provide states flexibility to address their highest environmental priorities while continuing to implement and report on core program requirements such as permitting, inspections, and enforcement.

Many EPA and state staff still embodied their media-specific, activity-based cultures and lacked trust in the new system. They viewed their activity-based authorities under the media-specific statutes as having priority and had difficulty reconciling these media-specific activities with NEPPS' cross-media, priority-setting process that focuses on environmental results rather than on the number of permits and inspections.

Although NEPPS and PPGs have their own overall goals, EPA has not defined its performance measures and related milestones to measure how the Agency and its partners are progressing toward accomplishing those goals. EPA has not defined specific measurable goals for evaluating whether it is making progress toward obtaining environmental results and whether NEPPS and PPGs are contributing to those results.

The Agency agreed with many of the recommendations presented in OIG audits and is in the process of building the institutional capacity and infrastructure to accomplish NEPPS work. EPA prepared a corrective action plan with milestone dates that takes a comprehensive approach to addressing NEPPS implementation. We believe that the increased emphasis the Agency has recently placed on this very important area will result in more effective working relationships and thus be more effective and efficient. Because NEPPS is an integral part of all EPA programs, the Agency needs to continue this recent attention. We will continue to monitor Agency progress closely.

# KEY MANAGEMENT CHALLENGES AND SIGNIFICANT AGENCY PROGRESS TOWARDS THEIR RESOLUTION

(Prepared by EPA's Office of Inspector General)

#### **SUPERFUND 5-YEAR REVIEWS**

The Superfund statute requires that remedial actions, where hazardous substances, pollutants, or contaminants remain onsite be reviewed every 5 years to assure that human health and the environment continue to be protected. Some 5-year reviews found that additional corrective actions were needed. This issue is of growing importance because containment remedies have been used more frequently since 1992.

In March 1995 we reported that a substantial number of 5-year reviews were not performed due largely to the low priority given them by Agency management. We recommended several options for improving the program and reducing the backlog. At that time Agency management agreed to implement the recommendations or take other actions to address the issues. However during our 1999 followup audit we found that (1) the backlog of 5-year reviews was nearly three times larger than at the time of the previous audit, (2) approximately 30 percent of the reports did not contain a definitive statement on protectiveness or information in the report and seemed to conflict with the statement made, and (3) results of the reviews were not being reported to the Congress or the public.

We estimated that EPA might need to devote approximately \$1 million above the expected spending level each year for the next 3 years to eliminate the backlog. At the conclusion of our followup audit the Agency had not yet committed the funds necessary for accomplishing this work. The increasing use of containment remedies, a growing backlog of 5-year reviews, the repeat nature of many of our findings, and a need to devote additional resources warrant EPA's formal recognition of the importance of the 5-year program and the establishment of necessary corrective actions as priority action items.

EPA identified this as an FY 1999 management control weakness with an FY 2002 correction date. EPA reports completing 51 percent of the backlog of 5-year reviews during FY 2000. Since it had projected a 3-year schedule to eliminate the backlog, the Agency is progressing faster than expected. We will continue to monitor the Agency's progress in reducing the backlog.

#### THE GREAT LAKES PROGRAM

The Great Lakes Water Quality Agreement between the United States and Canada was signed over 25 years ago. The purpose of the Agreement is to restore and maintain the chemical, physical, and biological integrity of the Great Lakes basin ecosystem. The basin area is home to more than one-tenth of the U.S. population and has some of the world's largest concentrations of industry. Environmental challenges include contaminated sediments, the effects on exotic species, and loss of habitat.

We previously reported that EPA needed to improve and complete its LaMPs and RAPs, which were established as systematic and comprehensive ecosystem approaches to address the Great Lakes. These plans were taking considerably longer than expected to complete. For example while a draft LaMP for Lake Michigan was first published in 1992, it had never been finalized. The statutory deadline for incorporating RAPs into state water quality plans was January 1, 1993. At the time of our review no U.S. RAPs had been fully implemented. Without these plans there was no assurance that EPA was doing the right, most costeffective, and highest priority activities needed to protect the Great Lakes. We reported that EPA and its partners had been slow in restoring and maintaining the integrity of the Great Lakes basin. We found that states were frustrated over the slow progress made and, if significant progress were not made in the near future, might withdraw their support, affecting EPA's ability to accomplish its mission.

The Agency has made progress in the last year. Through a major effort the Agency issued LaMPs for Lakes Michigan, Erie, and Superior and an action plan for Lake Huron in April 2000. The Lake Ontario LaMP was completed in 1998. These plans now serve as guides for future activities on the Great Lakes. In addition EPA programs are committed to LaMP implementation priorities and a reinstituted Great Lakes U.S. Policy Committee to discuss RAP issues leading to increased attention to RAP issues and initiation of RAP delisting criteria. The Great Lakes National Program Office and EPA Region 5 staff and management also have given priority to resolving the recommendations in our 1999 report. They are keeping us informed about their progress and indicate that most of the action items have been resolved.

# FY 2000 ANNUAL REPORT

# FY 2000 ANNUAL FINANCIAL STATEMENTS

**SECTION IV** 



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# MESSAGE FROM THE DEPUTY CHIEF FINANCIAL OFFICER

I am pleased to present the fiscal year (FY) 2000 audited financial statements of the Environmental Protection Agency (EPA). This year the statements are presented for the first time as an integral part of our Annual Report. As such, they offer Congress and the public a clear and comprehensive picture of the Agency's progress over the past year under a single comprehensive document. This year's financial statements provide strong evidence of EPA's commitment to effective management of its resources and finances. In addition, they portray progress toward the Office of the Chief Financial Officer's (OCFO) goal of providing better and more timely cost information and reporting, thereby allowing EPA's program offices to more efficiently accomplish their environmental and public health protection mission.

EPA has achieved an unqualified opinion on its financial statements this year, an important accomplishment and testimony to the diligent work of the finance community in addressing several financial weaknesses noted in our prior year statements. An unqualified opinion conveys an important message about sound financial management within an organization. It reflects that EPA has improved its methods, processes and systems for recording and reporting financial information to the extent that it fairly presents and characterizes the Agency's financial position, a significant issue for Congress, the public and our stakeholders.

During FY 2000, the OCFO made significant progress on a number of important management initiatives. In the area of results-based management, we issued EPA's revised Strategic Plan for FY 2000-2005, which lays out the Agency's long-term goals, guides us in establishing annual goals, allows us to measure progress in achieving our goals, and provides a basis from which Agency managers can focus resources on the highest priority environmental issues. We also issued our first Annual Performance Report, providing Congress and the public with a comprehensive, plain-English account of Agency performance. In the cost accounting arena, we established a new indirect cost accounting methodology which substantially boosts the amount of Superfund cleanup costs we can expect to recover from Responsible Parties. In the budget area, we streamlined our process for managing Trust Fund carryover funds: by making these resources immediately available to program managers for important environmental projects, we not only reduced administrative burden, but also strengthened accountability.

The OCFO also made great strides in improving the security of its financial management systems as a result of numerous independent reviews. We established an OCFO Information Security Council to provide direction and oversight to these efforts and began vulnerability and risk assessments of our critical systems. The rapidly changing and complex environment associated with systems security will require constant and long term vigilance to protect against intruders.

Over the past year, we also made substantial progress in planning an orderly replacement of our legacy systems with more modern and integrated financial systems. We completed the evaluation for replacing our aging payroll system and created a centralized staff to oversee the planning and integration of our critical systems. In addition, the OCFO moved to modernize the Agency's financial reporting tools by adopting a new, user-friendly Financial Data Warehouse. These systems efforts, along with our on-going automation initiatives in travel, grants and vendor payments, go a long way toward ensuring sound stewardship, optimal leveraging of resources, and the integrity of our critical data. The ultimate benefit for our program managers and stakeholders will be better, faster, and easier to use financial data, cost information and reporting tools to support day-to-day decision-making needs as well as long range planning efforts.

Many challenges lie ahead as we enter a new era of public stewardship and accountability. For example, our systems modernization efforts have just begun. While we anticipate our payroll replacement efforts will move along substantially this year, the groundwork for replacing our core financial management system has only recently gotten underway. We also look forward to improving our cost accounting processes by capturing and reporting additional financial information to better serve the needs of EPA's program managers.

I would like to express my thanks to all the people who helped EPA obtain its unqualified opinion on the financial statements. Such an achievement requires a tremendous effort from individuals at all levels of the organization. The preparation and presentation of fairly presented and timely financial statements is dependent on the day-to-day effort of countless individuals. Whether they carefully record and monitor transactions, oversee budget execution, operate our financial systems, develop accounting policies, provide financial analysis or audit our statements, we owe a debt of gratitude to them all. The preparation of EPA's financial statements has been a collaborative effort among many organizations -- the OCFO, the Office of the Inspector General, and EPA's many program, regional and administrative offices. I want to acknowledge the hard work and commitment of all the employees throughout the Agency who contributed to this effort.

I believe we have established a stable, yet dynamic, environment for implementing sound financial management within EPA. We intend to enhance and build upon this solid foundation. As we work toward forging stronger partnerships with our stakeholders and developing innovative and market-based approaches to improving our protection of the environment and the public health of all Americans, accurate, timely and useful financial information becomes critical to our success. We are committed to maintaining high standards as we face the challenges associated with modernizing and continually improving our financial and management systems and processes.

Michael W.S. Ryan

Deputy Chief Financial Officer

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### CFO ANALYSIS

# Chief Financial Officer's Analysis of Financial Statement Audit and Summary of FY 2000 Accomplishments

#### **Summary of Auditor's Report and Opinions**

The Agency prepared the following FY 2000 Financial Statements: Statement of Financial Position (Balance Sheet), Statement of Changes in Net Position, Statement of Net Cost, Statement of Budgetary Resources, Statement of Financing, and Statement of Custodial Activity. Each of these statements was broken out between the Superfund appropriation and all other funds. In addition, we prepared a Statement of Net Cost by Goal for each of the Agency's ten Strategic Goals.

The Office of Inspector General (OIG) stated "In our opinion, the consolidating financial statements present fairly the consolidated and individual assets, liabilities, net position, net cost, net cost by goal, changes in net position, budgetary resources, reconciliation of net cost to budgetary obligations, and custodial activity of the U.S. Environmental Protection Agency and its subsidiary funds, the Superfund Trust Fund and All Other Appropriated Funds, as of and for the year ended September 30, 2000, in accordance with generally accepted accounting principles." No material weaknesses were reported.

#### **Report on Internal Controls**

Although the OIG did not identify any material weaknesses, the audit report listed seven "reportable conditions," which are described below, along with a short statement on the Agency's position with respect to each of those items.

- ! Process for Preparing Financial Statements The OIG recommended that the Office of the Chief Financial Officer (OCFO) continue its aggressive efforts to improve the preparation and presentation of the Agency's financial statements and to advance the time frame for completion of the statements. OCFO agrees and will continue to work closely with the OIG in making those improvements.
- ! Accounting for Capitalized Property The OIG made eight recommendations for improving accountability over and accounting for Agency property assets. OCFO and the Office of Administration and Resources Management (OARM) have agreed with most of the OIG's recommendations and will be improving guidance, stressing quality control and performing additional followup with the offices directly responsible for property.
- ! EPA's Process for Reviewing Unliquidated Obligations The OIG made no new recommendations and acknowledged the actions we have taken to date to monitor unliquidated obligations and to ensure they are deobligated timely when appropriate.
- ! EPA's Interagency Agreement Invoice Approval Process The OIG made no new recommendations and recognized Agency progress in implementing corrective actions from earlier audit reports.
- ! Documentation and Approval of Journal Vouchers The OIG recommended that appropriate OCFO staff review Agency policy and procedures on journal vouchers and ensure that vouchers are properly documented prior to approval. OCFO agrees with that action.
- ! Timely Repayment of Asbestos Loan Debt to Treasury The OIG recommended that OCFO develop a schedule for repaying asbestos loan debt to Treasury on an annual basis and to reduce asbestos loan borrowing authority to zero. OCFO agrees to develop the recommended schedule and has already reduced borrowing authority to zero.

! Automated Application Processing Controls for the Integrated Financial Management System (IFMS) – The OIG made no new recommendations. The audit report summarized the history of the discussions between the OIG and OCFO on this topic and noted that in FY 2001 the OCFO will be taking steps to develop a project team to replace IFMS. OCFO believes the IFMS replacement project will address the OIG's concerns about the adequacy of automated application controls.

#### **Compliance with Laws and Regulations**

#### **Compliance with the Federal Financial Management Improvement Act (FFMIA)**

The OIG identified only one instance where they believed the OCFO was in substantial noncompliance with the FFMIA: the OIG believes that EPA does not comply with Statement of Federal Financial Accounting Standards Number 4, also known as the Managerial Cost Accounting Standards. Specifically, OIG's position is that EPA does not adequately: (1) determine the full cost of its activities; (2) accumulate and report the cost of activities on a regular basis for management information and other stakeholder purposes; and (3) always use appropriate costing methodologies to accumulate and assign cost to outputs.

While OCFO agrees that improvements in cost accounting can be made, OCFO believes that the Agency does comply with this Standard. A detailed discussion of this issue is provided in Section III of this Report under "Management Challenges." We will continue to improve Agency cost accounting and will work with the OIG on these improvements.

#### **Other Noncompliance Issues**

The OIG identified two other areas where they believed the OCFO had noncompliances that were not substantial and therefore not in violation of FFMIA.

- ! The OIG noted that EPA was unable to reconcile intra-governmental transactions. However, the OIG commended EPA's proactive approach to reconciling and acknowledged that the resolution of this issue requires Federal level action since EPA does not have control over the other federal agencies with which it must reconcile.
- ! The OIG stated that EPA's financial system security plans continued to be noncompliant, although they recognized that progress had been made. They also reported that they had determined that the Agency Remediation Plan, submitted to the Office of Management and Budget (OMB) on November 13, 2000, sufficiently addressed their prior concerns.

The OIG also noted that EPA is not complying with appropriation law when making disbursements for grants funded with more than one appropriation. However, this issue does not affect the audit opinion on the financial statements.

#### **Progress in Correcting Previously Identified Problems**

OCFO management undertook a concerted effort to resolve a backlog of audit issues raised in previous years. Consequently, issues such as financial statement preparation (discussed in the next section) and accounts receivable have been resolved or downgraded as major issues. The OIG has accepted all of the OCFO's proposed corrective actions raised in the FY 1998 and 1999 financial statement audits (except for cost accounting as noted above). The Agency has not encountered any significant impediments to correcting problems. One specific challenge for 2001 is the need to revise the methodology for determining accrued grant expenses.

#### **OCFO Accomplishments**

#### Planning, Analysis and Accountability

**Revised Strategic Plan.** Working with the rest of the Agency, OCFO developed and issued EPA's revised Strategic Plan for FY 2000-2005. The Strategic Plan lays out the Agency's ten long-term goals and guides us in establishing annual goals, allows us to measure how far we have come towards achieving our goals, and provides a basis from which Agency managers can focus resources on the highest priority environmental issues and ensure that we use taxpayer dollars effectively to achieve environmental results.

**Annual Performance Report.** In FY 2000, EPA completed its first full planning and accountability cycle under the Government Performance and Results Act (GPRA) with the March 2000 submission of its first Annual Performance Report. The Report presents to Congress and the public a comprehensive, plain-English account of EPA's FY 1999 performance.

**Results-Based Management.** The Deputy Administrator met with senior Agency managers in a series of meetings to discuss FY 1999 results and lessons learned, mid-year performance toward FY 2000 annual performance goals, progress toward long-term strategic goals, and work under way to improve performance measurement. Senior managers also discussed the broader lessons learned from the Agency's experience with GPRA implementation to date and improvements to be made for the future. In addition, to promote development of more outcome-oriented performance goals and measures, OCFO provided training workshops, technical assistance, and feedback on GPRA products to Agency managers and staff. The FY 2001 Annual Performance Plan had 5% more outcome-based goals than the FY 1999 Annual Performance Plan.

**Improving Agency Management.** EPA has made substantial progress toward resolving programmatic and administrative issues that have the potential to affect the Agency's ability to achieve its mission. Since 1990, EPA has corrected 27 integrity weaknesses and numerous major management challenges. In addition, EPA made significant progress in reducing the number of audits without final action as well as strengthening its audit management practices Agency-wide. In FY 2000, EPA reduced the number of audits without final action after 1 year by 35 percent and was responsible for addressing OIG recommendations and tracking follow-up activities on 503 audits.

#### **Audited Financial Statements**

EPA made substantial progress this year in preparing quality financial statements in a timely manner. The improvements made this year are phase one of a two-phased plan for improving the Agency's financial statement process. Our efforts began with completing a data integrity evaluation of our financial system by: (1) analyzing each accounting transaction to ensure all entries are proper; (2) conducting general ledger account analyses to identify accounts with incorrect balances; and (3) analyzing account relationships between proprietary and budgetary accounts.

The Agency also implemented a new policy document and supplemental procedural guidance on preparing and submitting annual audited financial statements in coordination with the OIG. This guidance established a formal process to monitor timelines for preparing annual financial statements as well as addressing audit questions and adjustments. In addition, guidance was implemented to establish more timely, accurate, and reliable reporting on EPA's trading partners.

Finally, the Agency successfully implemented an automated FACTS II process in its financial system and successfully submitted its budgetary reports electronically to Treasury via FACTS II.

We believe that the above and future efforts will continue to enhance the Agency's ability to prepare and publish complete, concise, understandable and meaningful information about the financial and operating performance of the Agency.

#### Streamlining Business Processes and Meeting Customer Needs

EPA took a number of steps to streamline and automate the Agency's administrative systems to provide the best services with reduced burden to our customers. For example, Agency grant recipients are beginning to benefit directly from a new system that allows them to request their funds on-line, and EPA is automating the entire travel reimbursement process, a significant reduction in administrative burden. EPA earned Governmentwide recognition for its efforts, along with several other agencies, to implement an on-line system that allows employees to view and update many payroll and benefits options such as health plan choices. The Agency also made substantial progress in replacing its aging payroll system, and efforts are now under way to replace the Integrated Financial Management System. Finally, EPA developed a financial data warehouse to improve Agency access to a range of financial and program data in order to better manage programs.

#### **Systems Integration and Security**

**Integration of Systems Implementation Project**. The Deputy CFO created a new Systems Planning and Integration Staff (SPIS) within the Office of the Comptroller's (OC) immediate office in response to several existing and emerging challenges with systems initiatives. These initiatives include improving financial performance through better financial management systems and providing the Agency with resource systems, policies, and support necessary to carry out resource management responsibilities. SPIS will provide OCFO with a centralized focus for planning, budgeting, integrating, and implementing OC financial systems.

The initial focus of SPIS is on replacing the Agency's payroll system, EPA's Personnel and Payroll System (EPAYS), and its supporting systems, and on assessing the need to replace or modernize the Agency's core financial management system, the Integrated Financial Management System (IFMS). In addition, SPIS will undertake a number of smaller projects where targeted technology changes create opportunities for improved services and streamlined processes.

**Financial System Security**. EPA's Deputy CFO established the OCFO Information Security Council to: (1) provide direction and oversight to financial and mixed system security efforts; (2) raise significant financial information security issues; (3) ensure coordination with other Agency offices; and (4) support proper security practices. In addition, OCFO conducted, in partnership with the Office of Environmental Information and the Office of Administration and Resources Management, Technical Vulnerability Assessments (TVAs) on the Agency's most critical financial systems.

#### **Working Capital Fund**

EPA's Office of Administration provides postage services and the Office of Technology, Operations, and Planning (OTOP) provides Agency wide services for telecommunications, mainframe computer services, and other Information Technology support. Since FY 1997, these activities have been financed by charges to Agency customers through a Working Capital Fund (WCF). The WCF undertook a number of initiatives to strengthen the overall operation and reporting of the Fund in our on-going efforts to provide quality services at competitive prices.

A WCF Review Team was assembled on behalf of the WCF Board of Directors to review and analyze the business, financial, accounting, and budget practices of the WCF Activities, as well as the cost and rates associated with the services provided. As a result, the Service Providers have been able to better align their costs with the services they support, resulting in equitable rates for the services provided.

When the WCF was established and began operations in 1997, one of the primary business principles was to recover full operating costs through the Fund's billing rates. However, in the past, EPA has not recovered certain required costs such as rent, utilities, etc. During FY 2000, OCFO established a policy requiring the recovery of full costs and the Agency is now recovering full cost in the Fund.

A team was commissioned to reconcile the OTOP's property records and to establish up-dated policies and procedures to accurately account for WCF property. As a result of this review, the WCF can now better identify capital equipment and property and compute precise depreciation costs for inclusion in the service rates.

#### **Debt Management**

During FY 2000, the Agency pursued various initiatives to improve its management and collection of outstanding accounts receivable in the Superfund program where the vast majority of the Agency's outstanding receivables reside.

Together with the Office of Enforcement and Compliance Assurance (OECA) and the OIG, accounts receivable management reviews were conducted in three of EPA's regional offices, with three more planned for FY2001. The reviews helped identify issues whose resolution will improve accounts receivable management. One such area was the need for additional policy and guidance for overdue debts. In response, OCFO and OECA issued guidance addressing the referral of overdue Superfund accounts receivable to the Department of Justice (DOJ). The EPA offices are currently working with DOJ to finalize policies for final disposition of Superfund debts.

#### Workforce Assessment

In the coming years, the most critical challenge facing OCFO management is to ensure that our most important asset, our staff, is well-placed to meet the challenges of the future. Changing technology and other factors are presaging a shift in the nature of work performed by OCFO staff, a shift from financial transaction-based processing to information management and analysis. In conjunction with the Agency wide workforce planning and assessment efforts described previously in this Annual Report, OCFO has completed the first phase of an assessment that formally sets out strategies for training, recruitment, and deployment of OCFO's human resources.

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- Note 27. Unobligated Balances
- Note 28. Obligated Balance, Net End of Period
- Note 29. Difference in Outlays between Statement of Budgetary Resources and SF-133
- Note 30. Statement of Financing
- Note 31. Beginning Unobligated Balances All Other Statement of Budgetary Resources
- Note 32. Change in Accounting for Trust Funds
- Note 33. Costs Not Assigned to Goals
- Note 34. Transfers-in and out, Statement of Changes in Net Position

#### **Notes to Financial Statements (continued)**

Note 35. Imputed Financing

Note 36. Change in Accounting for Cashout Interest, Superfund

#### **Supplemental Information Requested by OMB**

#### **Required Supplemental Information**

Deferred Maintenance (Unaudited)

Intra-governmental Assets (Unaudited)

Intra-governmental Liabilities (Unaudited)

Supplemental Statement of Budgetary Resources (Unaudited)

Working Capital Fund Supplemental Balance Sheet (Unaudited)

Working Capital Fund Supplemental Statement of Net Cost (Unaudited)

Working Capital Fund Supplemental Statement of Changes in Net Position (Unaudited)

Working Capital Fund Supplemental Statement of Budgetary Resources (Unaudited)

Working Capital Fund Supplemental Statement of Financing (Unaudited)

#### **Required Supplemental Stewardship Information**

Annual Stewardship Information (Unaudited)

#### Environmental Protection Agency Consolidating Balance Sheet As of September 30, 2000 (Dollars in Thousands)

	Superfund Trust Fund	All Others	Combined Totals	Intra-agency Co Eliminations	nsolidated Totals
ASSETS					
Intragovernmental:					
Fund Balance with Treasury (Note 2)	\$ 37,397	\$ 11,059,256	\$ 11,096,653	\$ 0\$	11,096,653
Investments (Note 4)	3,960,313	1,593,357	5,553,670	0	5,553,670
Accounts Receivable, Net (Note 5)	40,671	34,371	75,042	(4,191)	70,851
Other (Note 6)	21,789	7,452	29,241	(6,510)	22,731
Total Intragovernmental	4,060,170	12,694,436	16,754,606	(10,701)	16,743,905
Accounts Receivable, Net (Note 5)	617,039	87,895	704,934	0	704,934
Loans Receivables, Net - Non Federal (Note 7)	0	89,128	89,128	0	89,128
Cash (Note 3)	0	48	48	0	48
Inventory and Property Received in Settlement, Net (Note 8)	5,086	347	5,433	0	5,433
General Property, Plant and Equipment, Net (Note 9)	13,581	473,028	486,609	0	486,609
Other (Note 6)	750	1,712	2,462	0	2,462
Total Assets	\$ 4,696,626	\$ <u>13,346,594</u>	\$ 18,043,220	\$ <u>(10,701)</u> \$	18,032,519
LIABILITIES					
Intragovernmental:					
Accounts Payable	\$ 75,467	\$ 1,506	\$ 76,973	\$ 0\$	76,973
Debt (Note 10)	0	37,922	37,922	0	37,922
Accrued Liabilities	51,748	50,580	102,328	(4,191)	98,137
Custodial Liability (Note 11)	0	102,469	102,469	0	102,469
Other (Note 12)	8,848	28,849	37,697	(6,510)	31,187
Total Intragovernmental	136,063	221,326	357,389	(10,701)	346,688
Accounts Payable	46,066	84,956	131,022	0	131,022
Pensions and Other Actuarial Liabilities (Note 14)	6,637	27,036	33,673	0	33,673
Environmental Cleanup Costs (Note 20)	0	15,499	15,499	0	15,499
Accrued Liabilities	145,358	631,909	777,267	0	777,267
Cashout Advances and Deferrals, Superfund (Note 15)	372,586	0	372,586	0	372,586
Commitments and Contingencies (Note 18)	5,000	2,950	7,950		7,950
Other (Note 12)	63,024	200,510	263,534	0	263,534
Total Liabilities	774,734	1,184,186	1,958,920	(10,701)	1,948,219
NET POSITION					
Unexpended Appropriations (Note 16)	0		10,119,838		10,119,838
Cumulative Results of Operations	3,921,892	2,042,570	5,964,462	0	5,964,462
Total Net Position	3,921,892	12,162,408	16,084,300	0	16,084,300
<b>Total Liabilities and Net Position</b>	\$ <u>4,696,626</u>	\$ <u>13,346,594</u>	\$ <u>18,043,220</u>	\$ <u>(10,701)</u> \$	18,032,519

#### Environmental Protection Agency Consolidated Statement of Net Cost by Goal For the Year Ended September 30, 2000 (Dollars in Thousands)

	Clean Air			Prevent Pollution	Global Risks	
COSTS:					<u>Management</u>	
Intragovernmental	\$ 74,193	\$ 153,480	\$ 23,286	\$ 37,685	\$ 414,860	\$ 34,480
With the Public	462,922	3,209,971	80,003	231,151	1,478,910	179,880
Total Costs	537,115	3,363,451	103,289	268,836	1,893,770	214,360
Less:						
Earned Revenues	219	5,794	21,247	4,180	336,253	6,939
Total Revenue	219	5,794	21,247	4,180	336,253	6,939
Management Cost Allocation	55,155	75,785	22,444	35,815	139,392	16,236
NET COST OF OPERATIONS	\$ <u>592,051</u>	\$ <u>3,433,442</u>	\$ <u>104,486</u>	\$ <u>300,471</u>	\$ <u>1,696,909</u>	\$ <u>223,657</u>

Detailed descriptions of the above Goals are provided in EPA's FY 2000 Annual Report, Section II – GPRA Performance Results by Strategic Goal.

#### Environmental Protection Agency Consolidated Statement of Net Cost by Goal For the Year Ended September 30, 2000 (Dollars in Thousands)

	Right				Not	
	to Know	Sound Science	Credible	Effective Management	Assigned to Goals*	Consolidated Totals
COSTS:	MIUW	Science	Deterrent	Management	to Goals	1 Otals
Intragovernmental	\$ 27,229	\$ 49,203	\$ 69,713	\$ 139,354	\$ 120,149	\$ 1,143,632
With the Public	114,439	286,882	317,423	339,874	25,346	6,726,801
<b>Total Costs</b>	141,668	336,085	387,136	479,228	145,495	7,870,433
Less:						
Earned Revenues	338	1,490	495	1,694	3,335	381,984
Total Revenue	338	1,490	495	1,694	3,335	381,984
Management Cost Allocation	23,447	31,613	77,647	(477,534)	0	0
NET COST OF						
OPERATIONS	\$ <u>164,777</u>	\$ 366,208	\$ 464,288	0	\$ 142,160	\$
	-					

<sup>\*</sup> See Note 33.

Detailed descriptions of the above Goals are provided in EPA's FY 2000 Annual Report, Section II – GPRA Performance Results by Strategic Goal.

#### Environmental Protection Agency Consolidating Statement of Net Cost For the Year Ended September 30, 2000 (Dollars in Thousands)

		perfund ist Fund	All Others	Combined Totals	Intra-agen Eliminatio		onsolidated Totals
COSTS:							
Intragovernmental	\$	373,311	\$ 787,415	\$ 1,160,726	3 \$ (17,0	94) \$	1,143,632
With the Public		1,259,464	5,467,337	6,726,801	l	0	6,726,801
Expenses from Other Appropriations (Note 23)		31,270	(31,270)	(	)	0	0
Total Costs	_	1,664,045	6,223,482	7,887,527	(17,0	94)	7,870,433
Less:							
Earned Revenues		307,200	91,878	399,078	3 (17,0	94)	381,984
Total Revenue	_	307,200	91,878	399,078	(17,0	94)	381,984
NET COST OF OPERATIONS	\$ <u></u>	1,356,845	\$ <u>6,131,604</u>	\$7,488,449	<u> </u>	<u>0</u> \$	7,488,449

# Environmental Protection Agency Consolidating Statement of Changes in Net Position For the Year Ended September 30, 2000 (Dollars in Thousands)

	Superfund Trust Fund	All Others	Combined Totals	Intra-agency Eliminations	Consolidated Totals
Net Cost of Operations	\$ 1,356,845	\$ 6,131,604	\$ 7,488,449	\$ 0	\$ 7,488,449
Financing Sources (Other Than Exchange Revenues):					
Appropriations Used	0	6,632,631	6,632,631	0	6,632,631
Taxes and Non-Exchange Interest (Note 17)	240,808	260,272	501,080	0	501,080
Other Non-Exchange Revenue	1,192	12,958	14,150	0	14,150
Imputed Financing (Note 35)	32,063	168,659	200,722	0	200,722
Trust Fund Appropriations Received (Note 17)	700,000	(700,000)	0	0	0
Income from Other Appropriations (Note 23)	31,270	(31,270)	0	0	0
Transfers-In (Note 34)	9,707	63,730	73,437	(48,725)	24,712
Transfers-Out (Note 34)	(122,935)	(990)	(123,925)	48,725	(75,200)
Net Results of Operations before Trust Fund and Cashout Interest Accounting Changes	(464,740)	274,386	(190,354)	0	(190,354)
Cumulative Effect of Trust Fund Accounting Change on Prior Years' Net Results of Operations (Note 32)	2,656,831	91,596	2,748,427	0	2,748,427
Cumulative Effect of Accounting Change for Cashout Interest on Prior Years' Net Results of Operations (Note 36)		0	85,382	0	85,382
Net Results of Operations	2,277,473	365,982	2,643,455	0	2,643,455
Increases/(Decreases) in Unexpended Appropriations	(2,656,831)	42,874	(2,613,957)	0	(2,613,957)
Change in Net Position	(379,358)	408,856	29,498	0	29,498
Net Position - Beginning of Period	4,301,250	11,753,552	16,054,802	0	16,054,802
Net Position - End of Period	\$ 3,921,892	\$ 12,162,408	\$ 16,084,300	\$0	\$ 16,084,300

#### Environmental Protection Agency Combined Statement of Budgetary Resources For the Year Ended September 30, 2000 (Dollars in Thousands)

	Superfund Trust Fund	All Others	Combined Totals	
Budgetary Resources				
Budget Authority	\$ 1,346,470	\$ 6,920,006	\$ 8,266,476	
Unobligated Balances, Beginning of Period (Note 31)	482,872	1,674,675	2,157,547	
Net Transfers, Prior Period Balances	0	(977)	(977)	
Spending Authority from Offsetting Collections	123,161	311,272	434,433	
Adjustments (Note 26)	199,372	27,847	227,219	
Total Budgetary Resources	\$ 2,151,875	\$ 8,932,823	\$ 11,084,698	
Status of Budgetary Resources				
Obligations Incurred	\$ 1,701,337	\$ 7,158,665	\$ 8,860,002	
Unobligated Balances Available - Apportioned (Note 27)	449,538	1,644,998	2,094,536	
Unobligated Balances Not Available (Note 27)	1,000	129,160	130,160	
Total, Status of Budgetary Resources	\$ 2,151,875	\$ 8,932,823	\$ 11,084,698	
Outlays				
Obligations Incurred	\$ 1,701,337	\$ 7,158,665	\$ 8,860,002	
Less: Spending Authority from Offsetting Collections and Adjustments	(324,821)	(420,189)	(745,010)	
Subtotal	1,376,516	6,738,476	8,114,992	
Obligated Balance, Net - Beginning of Period	2,433,861	9,153,233	11,587,094	
Less: Obligated Balance, Net - End of Period (Note 28)	(2,283,790)	(9,289,444)	(11,573,234)	
Total Outlays	\$ 1,526,587	\$ 6,602,265	\$ 8,128,852	

#### Environmental Protection Agency Combined Statement of Financing For the Year Ended September 30, 2000 (Dollars in Thousands)

	Superfund Trust Fund	All Others	Combined Totals
Obligations and Nonbudgetary Resources			
Obligations Incurred	\$ 1,701,337 \$	7,158,665	\$ 8,860,002
Less: Spending Authority for Offsetting Collections and Adjustments			
Earned Reimbursements			
Collected	(108,997)	(230,981)	(339,978)
Receivable from Federal Sources	13,324	20,720	34,044
Change in Unfilled Customer Orders (Decreases)/Increases	(17,846)	(54,653)	(72,499)
Transfers from Trust Funds	(9,642)	(46,358)	(56,000)
Recoveries of Prior Year Obligations	(201,660)	(111,767)	(313,427)
Financing Imputed for Cost Subsidies (Note 35)	32,063	168,659	200,722
Income from Other Appropriations (Note 23)	31,270	(31,270)	0
Transfers-In/(Out) of Nonmonetary Assets	39	0	39
Exchange Revenue Not in the Entity's Budget	(215,449)	(3,088)	(218,537)
Total Obligations as Adjusted and Nonbudgetary Resources	1,224,439	6,869,927	8,094,366
Resources that Do Not Fund Net Cost of Operations			
Change in Amount of Goods, Services, and Benefits Ordered but Not			
Yet Provided - (Increases)/Decreases	143,536	(74,345)	69,191
Change in Unfilled Customer Orders, etc.	17,846	53,227	71,073
Costs Capitalized on the Balance Sheet - (Increases)/Decreases			
General Plant, Property and Equipment	(3,827)	(107,711)	(111,538)
Purchases of Inventory	0	(68)	(68)
Adjustments to Costs Capitalized on the Balance Sheet	0	153	153
Collections that Decrease Credit Program Receivables or Increase			
Credit Program Liabilities	0	5,014	5,014
Adjustment for Trust Fund Outlays that Do Not Affect Net Cost	(38,090)	(652, 268)	(690,358)
Total Resources that Do Not Fund Net Costs of Operations	119,465	(775,998)	(656,533)
Components of Costs that Do Not Require or Generate Resource	s		
Depreciation and Amortization	3,654	20,651	24,305
Bad Debt Related to Uncollectible Non-Credit Reform Receivables	3,075	1,518	4,593
Revaluation of Assets and Liabilities	0	(165)	(165)
Loss on Disposition of Assets	(813)	0	(813)
Other Expenses Not Requiring Budgetary Resources	45	3,409	3,454
Total Costs That Do Not Require Resources	5,961	25,413	31,374
Financing Sources Yet to be Provided (Note 30)	6,980	12,262	19,242
Net Costs of Operations	\$ 1,356,845 \$	6,131,604	\$ 7,488,449

#### Environmental Protection Agency Consolidated Statement of Custodial Activity For the Year Ended September 30, 2000 (Dollars in Thousands)

Revenue Activity:	
Sources of Collections:	
Fines and Penalties	76,850
Other	\$ 18,418
Total Cash Collections	95,268
Accrual Adjustment	(8,678)
Total Custodial Revenue	86,590
Disposition of Collections:	
Transferred to Others (General Fund)	97,730
Increases/(Decreases) in Amounts To Be Transferred	(11,140)
Total Disposition of Collections	86,590
Net Custodial Revenue Activity	\$0

# **Environmental Protection Agency Notes to Financial Statements (Dollars in Thousands)**

#### Note 1. Summary of Significant Accounting Policies

#### A. Basis of Presentation

These consolidating financial statements have been prepared to report the financial position and results of operations of the Environmental Protection Agency (Agency) for the Hazardous Substance Superfund (Superfund) Trust Fund and All Other Funds, as required by the Chief Financial Officers Act of 1990 and the Government Management Reform Act of 1994. The reports have been prepared from the books and records of the Agency in accordance with "Form and Content for Agency Financial Statements," specified by the Office of Management and Budget (OMB) in Bulletin 97-01, and the Agency's accounting policies which are summarized in this note. In addition to the guidance in Bulletin 97-01, the Statement of Net Cost has been prepared by the EPA strategic goals. These statements are therefore different from the financial reports also prepared by the Agency pursuant to OMB directives that are used to monitor and control the Agency's use of budgetary resources.

#### **B.** Reporting Entities

The Environmental Protection Agency was created in 1970 by executive reorganization from various components of other Federal agencies in order to better marshal and coordinate Federal pollution control efforts. The Agency is generally organized around the media and substances it regulates -- air, water, land, hazardous waste, pesticides and toxic substances. For FY 2000, the reporting entities are grouped as Hazardous Substance Superfund and All Other Funds.

#### Hazardous Substance Superfund

In 1980, the Hazardous Substance Superfund, commonly referred to as the Superfund Trust Fund, was established by the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) to provide resources needed to respond to and clean up hazardous substance emergencies and abandoned, uncontrolled hazardous waste sites. The Superfund Trust Fund financing is shared by Federal and state governments as well as industry. The Agency allocates funds from its appropriation to other Federal agencies to carry out the Act. Risks to public health and the environment at uncontrolled hazardous waste sites qualifying for the Agency's National Priorities List (NPL) are reduced and addressed through a process involving site assessment and analysis, and the design and implementation of cleanup remedies. Throughout this process, cleanup activities may be supported by shorter term removal actions to reduce immediate risks. Removal actions may include removing contaminated material from the site, providing an alternative water supply to people living nearby, and installing security measures. NPL cleanups and removals are conducted and financed by the Agency, private parties, or other Federal agencies. Superfund includes the Treasury collections and investment activity. The Superfund Trust Fund is accounted for under Treasury symbol number 8145.

#### All Other Funds

All Other Funds include Trust Fund appropriations, General Fund appropriations, Revolving Funds, Special Funds, the Agency Budgetary Clearing accounts, Deposit Funds, General Fund Receipt accounts, the

Environmental Services Special Fund Receipt Account, the Miscellaneous Contributed Funds Trust Fund, and General Fund appropriations transferred from other Federal agencies as authorized by the Economy Act of 1932. Trust Fund appropriations are to the Leaking Underground Storage Tank (LUST) Trust Fund and the Oil Spill Response Trust Fund. General Fund appropriations are to State and Tribal Assistance Grants (STAG), Science and Technology (S&T), Environmental Programs and Management (EPM), Office of Inspector General (IG), Buildings and Facilities (B&F), and Payment to the Hazardous Substance Superfund. General Fund appropriations that no longer receive current appropriations but have unexpended authority are the Program and Research Operations (PRO), and Energy, Research and Development. Revolving Funds include the FIFRA Revolving Fund and Tolerance Revolving Fund, which receive no direct appropriations; however, they do collect fees from public industry as a source of reimbursement for the services provided. In addition to FIFRA and Tolerance, a Working Capital Fund (WCF) was established and designated as a franchise fund to provide computer operations support and postage service for the Agency. A Special Fund was established to collect the Exxon Valdez settlement as a result of the Exxon Valdez oil spill. All Other Funds are as follows:

The LUST Trust Fund was authorized by the Superfund Amendments and Reauthorization Act of 1986 (SARA) as amended by the Omnibus Budget Reconciliation Act of 1990. The LUST appropriation provides funding to respond to releases from leaking underground petroleum tanks. The Agency oversees cleanup and enforcement programs which are implemented by the states. Funds are allocated to the states through cooperative agreements to clean up those sites posing the greatest threat to human health and environment. Funds are used for grants to non-state entities including Indian tribes under Section 8001 of the Resource Conservation and Recovery Act. The program is financed by a 0.1 cent a gallon tax on motor fuels, which will expire in 2005, and is accounted for under Treasury symbol number 8153.

The Oil Spill Response Trust Fund was authorized by the Oil Pollution Act (OPA) of 1990. The Oil Spill Response Trust Fund was established in FY 1993 and monies were appropriated to the Oil Spill Response Trust Fund. The Agency is responsible for directing, monitoring and providing technical assistance for major inland oil spill response activities. This involves setting oil prevention and response standards, initiating enforcement actions for compliance with OPA and Spill Prevention Control and Countermeasure requirements, and directing response actions when appropriate. The Agency carries out research to improve response actions to oil spills including research on the use of remediation techniques such as dispersants and bioremediation. Funding of oil spill cleanup actions is provided through the Department of Transportation under the Oil Spill Liability Trust Fund and reimbursable funding from other Federal agencies. The Oil Spill Response Trust Fund is accounted for under Treasury symbol number 8221.

The State and Tribal Assistance Grants (STAG) appropriation provides funds for environmental programs and infrastructure assistance including capitalization grants for State revolving funds and performance partnership grants. Environmental programs and infrastructure supported are Clean and Safe Water; Capitalization grants for the Drinking Water State Revolving Funds; Clean Air; Direct grants for Water and Wastewater Infrastructure needs, Partnership grants to meet Health Standards, Protect Watersheds, Decrease Wetland Loss, and Address Agricultural and Urban Runoff and Storm Water; Better Waste Management; Preventing Pollution and Reducing Risk in Communities, Homes, Workplaces and Ecosystems; and Reduction of Global and Cross Border Environmental Risks. STAG is accounted for under Treasury symbol 0103.

The Science and Technology (S&T) appropriation finances salaries; travel; science; technology; research and development activities including laboratory and center supplies; certain operating expenses; grants; contracts; intergovernmental agreements; and purchases of scientific equipment. These activities provide the scientific basis for the Agency's regulatory actions. In FY 2000, Superfund research costs were appropriated in Superfund and transferred to S&T to allow for proper accounting of the costs. Scientific

and technological activities for environmental issues include Clean Air; Clean and Safe Water; Americans' Right to Know About Their Environment; Better Waste Management; Preventing Pollution and Reducing Risk in Communities, Homes, Workplaces, and Ecosystems; and Safe Food. The Science and Technology appropriation is accounted for under Treasury symbol 0107.

The Environmental Programs and Management (EPM) includes funds for salaries; travel; contracts; grants and cooperative agreements for pollution abatement, control and compliance activities; and administrative activities of the operating programs. Areas supported from this appropriation include Clean Air; Clean and Safe Water; Preventing Pollution and Reducing Risk in Communities, Homes, Workplaces, and Ecosystems; Better Waste Management, Restoration of Contaminated Waste Sites and Emergency Response; Reduction of Global and Cross Border Environmental Risks; Americans' Right to Know About Their Environment; Sound Science, Improved Understanding of Environmental Risk, and Greater Innovation to Address Environmental Problems; a Credible Deterrent to Pollution and Greater Compliance with the Law; and Effective Management. The Environmental Programs and Management appropriation is accounted for under Treasury symbol 0108.

The Office of Inspector General appropriation provides funds for audit and investigative functions to identify and recommend corrective actions on management and administrative deficiencies that create the conditions for existing or potential instances of fraud, waste and mismanagement. Additional funds for audit and investigative activities associated with the Superfund Trust Fund and the Leaking Underground Storage Tank Trust Fund are appropriated under those Trust Fund accounts and are transferred to the Office of Inspector General account. The audit function provides contract audit, internal and performance audit, and financial and grant audit services. The Office of Inspector General appropriation is accounted for under Treasury symbol 0112 and includes expenses incurred and reimbursed from the appropriated trust funds being accounted for under Treasury symbols 8145 and 8153.

The Buildings and Facilities appropriation provides for the construction, repair, improvement, extension, alteration, and purchase of fixed equipment or facilities that are owned or used by the Environmental Protection Agency. The Buildings and Facilities appropriation is accounted for under Treasury symbol 0110.

The Payment to the Hazardous Substance Superfund appropriation authorizes appropriations from the General Fund of the Treasury to finance activities conducted through Hazardous Substance Superfund. Payment to the Hazardous Substance Superfund is accounted for under Treasury symbol 0250.

The Asbestos Loan Program was authorized by the Asbestos School Hazard Abatement Act of 1986 to finance control of asbestos building materials in schools. Funds have not been appropriated for this Program since FY 1993. For FY 1993 and FY1992, the program was funded by a subsidy appropriated from the General Fund for the actual cost of financing the loans, and by borrowing from Treasury for the unsubsidized portion of the loan. The Program fund disbursed the subsidy to the Financing fund as loans were made, and disbursed administrative expenses to the providers. The Financing fund received the subsidy payment, borrowed from Treasury and disbursed loans and collects the asbestos loans. The Asbestos Loan Program is accounted for under Treasury symbol 4322 for loans receivable and loan collections on post FY 1991 loans; and under Treasury symbol 2917 for pre FY 1992 loans receivable and loan collections.

The Program and Research Operations appropriation provides salaries and travel associated with administering the operating programs within the Environmental Protection Agency. It incorporated personnel, compensation and benefit costs and travel, exclusive of the Hazardous Substance Response Trust Fund, the Leaking Underground Storage Tank Trust Fund, the Office of Inspector General and the

Oil Spill Response Trust Fund. In fiscal year 1996, Congress restructured the Agency's accounts. The Program and Research Operations appropriation was eliminated. Activity remaining from prior fiscal year appropriations is accounted for under Treasury symbol 0200. Unexpended authority for the Program and Research Operations appropriation was canceled at the end of the fiscal year.

The FIFRA Revolving Fund was authorized by the Federal Insecticide, Fungicide and Rodenticide Act Amendments of 1998, as amended by the Food Quality Protection Act of 1996. Fees are paid by industry to offset costs of accelerated reregistration, expedited processing of pesticides, and establishing tolerances for pesticide chemicals in or on food and animal feed. The FIFRA Revolving Fund is accounted for under Treasury symbol number 4310.

The Tolerance Revolving Fund was authorized in 1963 for the deposit of tolerance fees. Fees are paid by industry for EPA to establish tolerances of pesticide chemicals in or on food and animal feed. Effective January 2, 1997, fees collected are now being deposited in the Reregistration and Expedited Processing Revolving Fund (4310). The fees collected prior to this date are accounted for under Treasury symbol number 4311.

The Working Capital Fund (WCF) includes two activities: computer support services and postage. WCF derives revenue from these activities based upon fee for services. WCF's customers currently consist solely of Agency program offices. Accordingly, revenue generated by WCF and expenses recorded by the program offices for use of such services, along with the related advances/liabilities, are eliminated on consolidation. The WCF is accounted for under Treasury symbol 4565.

The Exxon Valdez Settlement Fund has funds available to carry out authorized environmental restoration activities. Funding is derived from the collection of reimbursements under the Exxon Valdez settlement as a result of the oil spill. The Exxon Valdez Settlement fund is accounted for under Treasury symbol number 5297.

Appropriations transferred to the Agency from other Federal agencies include funds from the Appalachian Regional Commission and the Department of Commerce, which provide economic assistance to state and local developmental activities; the Agency for International Development which provides assistance on environmental matters at international levels; and from the General Services Administration, which provides funds for rental of buildings, and operations, repairs, and maintenance of rental space. The transfers appropriations are accounted for under Treasury symbols 0200, 1010, 1021, 2050, and 4542.

Clearing Accounts include the Budgetary suspense account, Deposit in Transit differences, Unavailable Check Cancellations and Overpayments, and Undistributed and Letter of Credit differences. Clearing accounts are accounted for under Treasury symbols 3875 and 3880.

Deposit funds include Fees for Ocean Dumping, Nonconformance Penalties, Suspense and payroll deposits for Savings Bonds, and State and City Income Taxes Withheld. Deposit funds are accounted for under Treasury symbols 6050, 6264, 6265, 6266, 6275, 6500, and 6875.

General Fund Receipt Accounts include Hazardous Waste Permits; Miscellaneous Fines, Penalties and Forfeitures; General Fund Interest; Interest from Credit Reform Financing Accounts; Fees and Other Charges for Administrative and Professional Services; and Miscellaneous Recoveries and Refunds. General Fund Receipt accounts are accounted for under Treasury symbols 0895, 1099, 1435, 1499, 2410, 3200, and 3220.

The Environmental Services Receipt account was established for the deposit of fee receipts associated with environmental programs, including radon measurement proficiency ratings and training, motor vehicle engine certifications, and water pollution permits. Receipts in this special fund will be appropriated to the S&T appropriation and to the EPM appropriation to meet the expenses of the programs that generate the receipts. Environmental Services are unavailable receipts accounted for under Treasury symbol 5295.

The Miscellaneous Contributed Funds Trust Fund includes gifts for pollution control programs that are usually designated for a specific use by the donor and deposits from pesticide registrants to cover the costs of petition hearings when such hearings result in unfavorable decisions to the petitioner. Miscellaneous Contributed Funds Trust Fund is accounted for under Treasury symbol 8741.

The accompanying financial statements include the accounts of all funds described in this note. The expense allocation methodology is a financial statement estimate that presents EPA's programs at full cost. Superfund may charge some costs directly to the fund and charge the remainder of the costs to the All Other Funds in the Agency-wide appropriations. These amounts are presented as Expenses from Other Appropriations on the Statement of Net Cost and as Income from Other Appropriations on the Statement of Changes in Net Position and the Statement of Financing.

The Superfund Trust Fund is allocated general support services costs (such as rent, communications, utilities, mail operations, etc.) that were initially charged to the Agency's S&T and EPM appropriations. During the year, these costs are allocated from the S&T and EPM appropriations to the Superfund Trust Fund based on a ratio of direct labor hours, using budgeted or actual full-time equivalent personnel charged to these appropriations, to the total of all direct labor hours. Agency general support services cost charges to the Superfund Trust Fund may not exceed the ceilings established in the Superfund Trust Fund appropriation. The related general support services costs charged to the Superfund Trust Funds was \$56.3 million for FY 2000.

#### C. Budgets and Budgetary Accounting

#### Superfund

Congress adopts an annual appropriation amount to be available until expended for the Superfund Trust Fund. A transfer account for the Superfund Trust Fund has been established for purposes of carrying out the program activities. As the Agency disburses obligated amounts from the transfer account, the Agency draws down monies from the Superfund Trust Fund at Treasury to cover the amounts being disbursed.

#### All Other Funds

Congress adopts an annual appropriation amount for the LUST Trust Fund and for the Oil Spill Response Trust Fund to remain available until expended. A transfer account for the LUST Trust Fund has been established for purposes of carrying out the program activities. As the Agency disburses obligated amounts from the transfer account, the Agency draws down monies from the LUST Trust Fund at Treasury to cover the amounts being disbursed. The Agency draws down all the appropriated monies from the Treasury's Oil Spill Liability trust fund to the Oil Spill Response Trust Fund when Congress adopts the appropriation amount. Congress adopts an annual appropriation for STAG, Buildings and Facilities, and for Payments to the Hazardous Substance Superfund to be available until expended; adopts annual appropriation for S&T, EPM and for the Office of Inspector General to be available for two fiscal years. When the appropriations for the General Funds are enacted, Treasury issues a warrant to the respective appropriations. As the Agency disburses obligated amounts, the balance of funds available to the appropriation is reduced at Treasury.

The Asbestos Loan Program is a commercial activity financed by a combination from two sources: one for the long term cost of the loan and another for the remaining non-subsidized portion of the loan. The long term costs are defined as the net present value of the estimated cash flows associated with the loans. The portion of each loan disbursement that does not represent long term cost is financed under a permanent indefinite borrowing authority established with the Treasury. The annual appropriation bill limits the amount of obligations that can be made for direct loans. A permanent indefinite appropriation is available to finance the costs of subsidy re-estimates that occur after the year in which the loan is disbursed. No appropriation was adopted by Congress for FY 2000; therefore, there was no new financing available to the Asbestos Loan Program for FY 2000.

Funding of the FIFRA and the Tolerance Revolving Funds is provided by fees collected from industry to offset costs incurred by the Agency in carrying out these programs. Each year the Agency submits an apportionment request to OMB based on the anticipated collections of industry fees.

Funding of the WCF is provided by fees collected from other Agency appropriations collected to offset costs incurred for providing the Agency administrative support for computer support services and postage.

Funds transferred from other Federal agencies is funded by a non expenditure transfer of funds from the other Federal agencies. As the Agency disburses the obligated amounts, the balance of funding available to the transfer appropriation is reduced at Treasury.

Clearing accounts, Deposit accounts, and Receipt accounts receive no budget. The amounts are recorded to the Clearing and Deposit accounts pending further disposition. Amounts recorded to the Receipt accounts capture amounts receivable to or collected for the General Fund of the U.S. Treasury.

#### D. Basis of Accounting

#### Superfund and All Other Funds

Transactions are recorded on an accrual accounting basis and on a budgetary basis (where budgets are issued). Under the accrual method, revenues are recognized when earned and expenses are recognized when a liability is incurred, without regard to receipt or payment of cash. Budgetary accounting facilitates compliance with legal constraints and controls over the use of Federal funds. All interfund balances and transactions have been eliminated.

#### **E.** Revenues and Other Financing Sources

#### Superfund

The Superfund receives most funding needed to support the program through appropriations that may be used within statutory limits, for operating and capital expenditures (primarily equipment). Additional financing for the Superfund Trust Fund is obtained through reimbursements from other Federal agencies, from States for State Cost Share, and from potentially responsible parties (PRPs) for future costs. Revenues collected through cost recovery are deposited with the Trust fund at Treasury.

#### All Other Funds

The majority of All Other Funds appropriations receive funding needed to support programs through appropriations, which may be used, within statutory limits, for operating and capital expenditures. Under Credit Reform provisions, the Asbestos Loan Program received funding to support the subsidy cost of loans

through appropriations which may be used with statutory limits. The Asbestos Direct Loan Financing fund, an off-budget fund, receives additional funding to support the loan disbursements through collections from the Program fund for the subsidized portion of the loan and through borrowing from Treasury for the non-subsidized portion. The last year Congress provided appropriations for this fund was 1993, accordingly, no new funding has been available for this program. The FIFRA and the Tolerance Revolving Funds receive funding, which is now deposited with the FIFRA Revolving Fund, through fees collected for services provided. The FIFRA Revolving Fund also receives interest on invested funds. The WCF receives revenue through fees collected for services provided to Agency program offices. Such revenue is eliminated with related Agency program expenses on Consolidation. The Exxon Valdez Settlement Fund received funding through reimbursements.

Appropriations are recognized as Other Financing Sources when earned, i.e., when goods and services have been rendered without regard to payment of cash. Other revenues are recognized when earned, i.e., when services have been rendered.

#### F. Funds with the Treasury

#### Superfund and All Other Funds

The Agency does not maintain cash in commercial bank accounts. Cash receipts and disbursements are handled by Treasury. The funds maintained with Treasury are Appropriated Funds, Revolving Funds and Trust Funds. These funds have balances available to pay current liabilities and finance authorized purchase commitments.

#### G. Investments in U.S. Government Securities

#### Superfund and All Other Funds

Investments in U.S. Government securities are maintained by Treasury and are reported at amortized cost net of unamortized discounts. Discounts are amortized over the term of the investments and reported as interest income. Investments are held to maturity, unless they are needed to finance operations of the fund.

#### H. Securities Received in Settlement

#### Superfund

During FY 1993 and FY 1996, the Agency received marketable equity securities, valued at a total \$5,146 thousand of which \$5,127 thousand are still held, from a company in settlement of Superfund cost recovery actions. The Agency records marketable securities at cost as of the date of receipt. Marketable securities are held by Treasury and reported at their cost value in the financial statements until sold.

#### I. Accounts Receivable and Interest Receivable

#### Superfund

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended by the Superfund Amendments and Reauthorization Act (SARA), provides for the recovery of costs from potentially responsible parties (PRPs). However, cost recovery expenditures are expensed when incurred since there is no assurance that these funds will be recovered.

It is the Agency's policy to record accounts receivable from PRPs for Superfund site response costs when a consent decree, judgment, administrative order, or settlement is entered. These agreements are generally negotiated after site response costs have been incurred. It is the Agency's position that until a consent decree or other form of settlement is obtained, the amount recoverable should not be recorded.

The Agency also records accounts receivable from states for a percentage of Superfund site remedial action costs incurred by the Agency within those states. As agreed to under Superfund State Contracts (SSCs), cost sharing arrangements under SSCs may vary according to whether a site was privately or publicly operated at the time of hazardous substance disposal and whether the Agency response action was removal or remedial. SSC agreements are usually for 10% or 50% of site remedial action costs. States may pay the full amount of their share in advance, or incrementally throughout the remedial action process. Allowances for uncollectible state cost share receivables have not been recorded, because the Agency has not had collection problems with these agreements.

#### **All Other Funds**

The majority of receivables for All Other Funds represent interest receivable for Asbestos and FIFRA and both accounts receivable and interest receivable to the General Fund of the Treasury.

#### J. Loans Receivable

#### All Other Funds

Loans are accounted for as receivables after funds have been disbursed. Loans receivable resulting from obligations on or before September 30, 1991, are reduced by the allowance for uncollectible loans. Loans receivable resulting from loans obligated on or after October 1, 1991, are reduced by an allowance equal to the present value of the subsidy costs associated with these loans. The subsidy cost is calculated based on the interest rate differential between the loans and Treasury borrowing, the estimated delinquencies and defaults net of recoveries offset by fees collected and other estimated cash flows associated with these loans.

#### K. Appropriated Amounts Held by Treasury

#### Superfund and All Other Funds

For the Superfund and LUST Trust Funds, and for amounts appropriated to the Office of Inspector General from the Superfund and LUST Trust Funds, cash available to the Agency that is not needed immediately for current disbursements remains in the respective Trust Funds managed by Treasury. At the end of FY 2000 approximately \$2.7 billion remained in the Treasury managed Superfund Trust Fund and approximately \$86.2 million remained in the LUST Trust Fund to meet the Agency's disbursement needs.

#### L. Advances and Prepayments

### Superfund and All Other Funds

Advances and prepayments represent funds advanced or prepaid to other entities both internal and external to the Agency for which a budgetary expenditure has not yet occurred.

#### M. Property, Plant, and Equipment

#### Superfund and All Other Funds

The Fixed Assets Subsystem (FAS) implemented in FY 1997 maintains EPA-held personal and real property records. The FAS automatically generates depreciation entries monthly based upon the acquisition date. Purchases of EPA-held and contractor-held personal equipment are capitalized if the equipment is valued at \$25 thousand or more and has an estimated useful life of at least two years. Prior to implementing FAS, depreciation was taken on a modified straight-line basis over a period of six years depreciating 10% the first and sixth year, and 20% in years two through five. All EPA-held personal equipment purchased before the implementation of FAS was assumed to have an estimated useful life of five years. New acquisitions of EPA-held personal equipment are depreciated using the straight-line method over the specific assets' useful lives, ranging from two to 15 years.

Real property consists of land, buildings, and capital and leasehold improvements. Real property, other than land, is capitalized when the value is \$75 thousand or more. Land is capitalized regardless of cost. Buildings are valued at an estimated original cost basis, and land is valued at fair market value. Depreciation for real property is calculated using the straight-line method over the specific assets' useful lives, ranging from 10 to 102 years. Leasehold improvements are amortized over the lesser of their useful lives or the unexpired lease terms. In addition to property and improvements not meeting the capitalization criteria, expenditures for minor alterations, and repairs and maintenance are expensed as incurred.

#### N. Liabilities

#### Superfund and All Other Funds

Liabilities represent the amount of monies or other resources that are likely to be paid by the Agency as the result of a transaction or event that has already occurred. However, no liability can be paid by the Agency without an appropriation or other collection of revenue for services provided. Liabilities for which an appropriation has not been enacted are classified as unfunded liabilities and there is no certainty that the appropriations will be enacted. Liabilities of the Agency, arising from other than contracts, can be abrogated by the Government acting in its sovereign capacity.

#### O. Borrowing Payable to the Treasury

#### All Other Funds

Borrowing payable to Treasury results from loans from Treasury to fund the Asbestos direct loans described in part B and C of this note. Periodic principal payments are made to Treasury based on the collections of loans receivable.

#### P. Interest Payable to Treasury

#### All Other Funds

The Asbestos Loan Program makes periodic interest payments to Treasury based on its debt to Treasury. At the end of FY 2000, there was no outstanding interest payable to Treasury since payment was made through September 30.

#### Q. Accrued Unfunded Annual Leave

#### Superfund and All Other Funds

Annual, sick and other leave is expensed as taken during the fiscal year. Sick and other leave earned but not taken is not accrued as a liability. Annual leave and compensation time in lieu of overtime earned but not taken as of the end of the fiscal year are accrued as an unfunded liability. Accrued unfunded leave is included in the Statement of Financial Position as a component of "Other Liabilities-Governmental." As of September 30, 2000, the unfunded leave liability for the Superfund Trust Fund was \$19.6 million and for All Other Funds was \$93.2 million.

#### R. Retirement Plan

#### Superfund and All Other Funds

The majority of the Agency's employees participate in the Civil Service Retirement System (CSRS), to which the Agency contributes 8.51% and employees contribute 7.40% (as of January 1, 2000) of base pay.

On January 1, 1987, the Federal Employees Retirement System (FERS) went into effect pursuant to Public Law 99-335. Most employees hired after December 31, 1983, are automatically covered by FERS and Social Security. Employees hired prior to January 1, 1984, were allowed to either join FERS and Social Security or remain in CSRS. A primary feature of FERS is that it offers a savings plan to the Agency employees which automatically contributes 1 percent of pay and matches any employee contribution up to an additional 4 percent of pay. For most employees hired after December 31, 1983, the Agency also contributes the employer's matching share for Social Security.

With the issuance of "Accounting for Liabilities of the Federal Government" (SFFAS-5), which was effective for the FY 1997 financial statements, accounting and reporting standards were established for liabilities relating to the Federal employee benefit programs (Retirement, Health Benefits and Life Insurance). SFFAS-5 requires that employing agencies recognize the cost of pensions and other retirement benefits during their employees' active years of service. SFFAS-5 requires that the Office of Personnel Management, as administrator of the Civil Service Retirement and Federal Employees Retirement Systems, the Federal Employees Health Benefits Program, and the Federal Employees Group Life Insurance Program, provides EPA with the "Cost Factors" to compute EPA's liability for each program.

#### S. Cost Accounting

#### Superfund and All Other Funds

EPA has designated the Goals, Objectives and Sub-objectives of the Agency's Strategic Plan prepared under the Government Performance and Results Act (GPRA) as the Agency's "products and services." Under the GPRA structure, each expenditure from obligations made using new obligational authority (NOA) in FY 1999 forward is made at the Goal, Objective, Sub-objective level that is part of the Program Results Code (PRC). EPA's senior management made the decision not to "recast" resources under the old Program Element (PE) structure to the GPRA structure. However, the program offices where these PEs were obligated and disbursed cross walked the expenses to the appropriate Goal(s). Most of the PEs can be traced directly to a Goal and in those cases where PEs crossed Goals, the allocation of expenses was done on a reasonable and consistent basis.

Program Performance Grants (PPGs) allow state and interstate agencies to combine two or more environmental program grants into one grant. PPGs are performance based and the States are accountable for performance but not for detailed accounting as to how funds are spent. These grants may cover several Goals. EPA grant project officers in discussion with States align the grant work plan with the GPRA structure. Accounting at the Goal level is based on expected performance as outlined in the work plan. Adjustments are made to the accounting only if the actual performance varies materially from the grant work plan.

Activities occurring in Goal 10 are for the administrative functions necessary for a federal agency to support its complex and wide reaching programs. These activities are not directly charged to the Agency's environmental programs. For the Statement of Net Cost by Goal, the costs in Goal 10 are allocated to Goals 1 thru 9 based on the total Full Time Equivalents (FTE) within each Goal. The Goal 10 agency-wide costs are allocated based on the total FTE in each of the Goals; costs associated with regional support are allocated based on Regional FTE in each Goal.

#### **Note 2. Fund Balances with Treasury**

Fund Balances with Treasury as of September 30, 2000, consists of the following (in thousands):

	Entity <u>Assets</u>			Non- Assets	Total		
<b>Trust Funds:</b>							
Superfund	\$	37,397	\$	0	\$	37,397	
LŪST		1,300		0		1,300	
Oil Spill		3,106		0		3,106	
<b>Revolving Funds:</b>							
FIFRA		5,442		0		5,442	
Tolerance		22		0		22	
Working Capital		52,509		0		52,509	
<b>Appropriated Funds</b>	1	0,913,47		0		10,913,471	
Other Fund Types	_	76,338	_	7,068	_	83,406	
Total	\$ <u> </u> 1	1.089.58	\$_	7.068	\$_	11.096,653	

Entity fund balances include balances that are available to pay current liabilities and to finance authorized purchase commitments. Also, entity assets, Other Fund Types consist of the Environmental Services Receipt account. The Environmental Services Receipt account is a special fund receipt account. Upon Congress appropriating the funds, EPA will use the receipts in the Science and Technology appropriation and the Environmental Programs and Management appropriation.

The non-entity Other Fund Type consist of deposit funds. The deposit funds are awaiting documentation for the determination of proper accounting disposition.

#### Note 3. Cash

In All Others, as of September 30, 2000, Cash consisted of imprest funds totaling \$48 thousand.

#### Note 4. Investments

As of September 30, 2000, investments consisted of the following:

#### **Amounts for Balance**

		Unamortized (Premium)	Interest	Investment	Market
<u>Superfund</u> Intragovernmental					
Non-Marketable All Others Intragovernmental	\$ <u>4,126,45</u>	\$ <u>166,180</u>	\$ 43	\$ <u>3,960,313</u>	\$ 3,960,313
Non-Marketable	\$ <u>1,669,66</u>	\$ <u>76,334</u>	\$ 26	\$ 1,593,357	\$ 1,593,357

CERCLA, as amended by SARA, authorizes EPA to recover monies to clean up Superfund sites from responsible parties (RP). Some RPs file for bankruptcy under Title 11 of the U.S. Code. In bankruptcy settlements, EPA is an unsecured creditor and is entitled to receive a percentage of the assets remaining after secured creditors have been satisfied. Some RPs satisfy their debts by issuing marketable securities in the reorganized company. The Agency does not intend to exercise ownership rights to these securities, and instead will convert these securities to cash as soon as practicable.

#### **Note 5. Accounts Receivable**

The Accounts Receivable for September 30, 2000, consist of the following:

	<u>Su</u>	<u>perfund</u>		All
<b>Intragovernmental Assets:</b>				
Accounts & Interest Receivable	\$	40,671	\$	34,371
Total	\$	40,671	\$	34,371
<b>Governmental Assets:</b>				
Unbilled Accounts Receivable	\$	88,209	\$	0
Accounts & Interest Receivable		883,938		155,581
Less: Allowance for Doubtful	(	<u>355,108)</u>		(67,686)
Total	\$_	617,039	\$_	87,895

Accounts receivable due from other Federal agencies are considered fully collectible.

The Allowance for Doubtful Accounts is determined on a specific identification basis as a result of a case-by-case review of receivables at the regional level, and a reserve on a percentage basis for those not specifically identified.

The Accounts Receivable amount above includes a Superfund penalty amount of \$638.6 thousand that was applied and posted late in FY 2000. The agency believes that collection of this amount is not likely. Had the penalty been applied earlier in the year, the Allowance for Doubtful Accounts would have been adjusted upward by \$479 thousand to account for the low likelihood of collection.

#### **Note 6. Other Assets**

Other Assets for September 30, 2000, consist of the following

	Superfund Trust Fund			All hers	Combined Totals		Intra-agency C Eliminations		Consolidated Totals	
Intragovernmental Assets:										
Advances to Federal Agencies	\$	15,279	\$	7,409	\$	22,688	\$	0	\$	22,688
Advances to Working Capital Fund		6,510		0		6,510	)	(6,510)		0
Advances for Postage	_	0		43	_	43	<u> </u>	0		43
<b>Total Intragovernmental Assets</b>	<u>\$</u> _	21,789	<u>\$_</u>	7,452	\$_	29,241	<u> </u>	(6,510)	<u>\$</u>	22,731
Governmental Assets:										
Travel Advances	\$	(18)	\$	(916)	\$	(934)	\$	0	\$	(934)
Letter of Credit Advances		0		599		599	)	0		599
Grant Advances		0		1,945		1,945	,	0		1,945
Other Advances		767		75		842	),			842
Bank Card Payments		1		0		1				1
Deposit on Returnable Containers		0		(2)		(2)		0		(2)
Prepaid Rent	_	0		11	_	11		0		11
Total Governmental Assets	\$	750	\$	1,712	\$	2,462	\$	0	\$	2,462

#### Note 7. Loans Receivable, Net - Non-Federal

Asbestos Loan Program loans disbursed from obligations made prior to FY 1992 are net of an allowance for estimated uncollectible loans, if an allowance was considered necessary. Loans disbursed from obligations made after FY 1991 are governed by the Federal Credit Reform Act. The Act mandates that the present value of the subsidy costs (i.e., interest rate differentials, interest subsidies, anticipated delinquencies, and defaults) associated with direct loans be recognized as an expense in the year the loan is made. The net present value of loans is the amount of the gross loan receivable less the present value of the subsidy.

An analysis of loans receivable and the nature and amounts of the subsidy and administrative expenses associated entirely with Asbestos Loan Program loans as of September 30, 2000, is provided in the following sections.

	Rec	Loans ceivable, Gross	Alle	owance*	Assets	Value of sets Related Direct Loans		
Direct Loans Obligated Prior to FY 1992	\$	58,114	\$	0	\$	58,114		
Direct Loans Obligated After FY 1991	_	46,909		(15,895)		31,014		
Total	\$	105,023	\$	(15,895)	\$	89,128		

<sup>\*</sup> Allowance for Pre-Credit Reform loans (Prior to FY 1992) is the Allowance for Estimated Uncollectible Loans and the Allowance for Post Credit Reform Loans (After FY 1991) is the Allowance for Subsidy Cost (present value).

	terest erential		_	ee sets	Total
Direct Loan Subsidy Expense	\$ 2,640	\$ 0	\$	0	\$ 2,640

#### Note 8. Inventory and Property Received in Settlement, Net

The Inventory and Related Property at September 30, 2000, consisted of the following:

	Sup	<u>erfund</u>	All (	<u>Other</u>
Operating Materials and Supplies Held for Use in Normal Operations	\$	0	\$	306
Securities Received in Settlement		5,086		41
Total	\$	5,086	\$	347

The securities represent assets received during a bankruptcy proceeding. The Agency does not intend to exercise ownership rights related to these securities, and instead will convert these securities to cash as soon as practicable.

#### Note 9. General Plant, Property and Equipment

Superfund property, plant and equipment, consists of personal property items held by contractors and the Agency. EPA also has property funded by various other Agency appropriations. The property funded by these appropriations are presented in the aggregate under "All Others" and consists of real, EPA-Held and Contractor-Held personal, and capitalized-leased property.

Purchases of EPA-Held and Contractor-Held personal property are capitalized if the equipment is valued at \$25 thousand or more and has an estimated useful life of at least two years. Software is capitalized if the purchase price is \$100 thousand or more for a revenue generating activity, such as the Working Capital Fund, and has an estimated useful life of at least two years. The Agency depreciates EPA-Held personal property using a straight-line method over the asset's useful life ranging from two to 15 years. Contractor-Held personal property is depreciated over five years using a modified straight-line method. Real property, other than land, is capitalized when the value is \$75 thousand or more and is depreciated using the straight-line method over the specific asset's useful life ranging from 10 to 102 years. Land is capitalized regardless of cost. Leasehold improvements are amortized over the lesser of their useful lives or the unexpired lease term.

As of September 30, 2000, Plant, Property and Equipment consisted of the following:

	Superfund					All Others						
	_	uisition alue	Accumulated Depreciation		Net Book Value		Acquisition Value		Accumulated Depreciation		Net Book Value	
EPA-Held Equipment	\$	24,733	\$	(16,313)	\$	8,420	\$	134,893	\$	(86,883)	\$	48,010
Software		0		0		0		550		0		550
Contractor-Held Equipment		8,814		(3,653)		5,161		34,103		(27,551)		6,552
Land and Buildings		0		0		0		461,817		(73,430)		388,387
Capital Leases		0	_	0	_	0	_	40,992		(11,463)	_	29,529
Total	\$	33,547	\$	(19,966)	\$	13,581	\$	672,355	\$	(199,327)	\$_	473,028

#### Note 10. Debt

The Debt consisted of the following as of September 30, 2000:

All Others	_	inning <u>lance</u>	Net Borrowi	ing		ıding <u>lance</u>
Other Debt:						
Debt to Treasury	\$	37,922	\$	0	\$	37,922
Classification of Debt:						
Intra-governmental Debt					\$_	37,922
Total					\$	37,922

#### **Note 11. Custodial Liability**

Custodial Liability represent the amount of net accounts receivable that, when collected, will be deposited to the General Fund of the Treasury. Included in the custodial liability are amounts for fines and penalties, interest assessments, repayments of loans, and miscellaneous other accounts receivable.

#### **Note 12. Other Liabilities**

The Other Liabilities, both intragovernmental and non-Federal, for September 30, 2000, are as follows:

Other Liabilities - Intragovernmental	Cover <u>Budgetary</u>	ed by <u>Resources</u>	Not Covered by <u>Budgetary Resources</u>			<u>Total</u>		
Superfund - Current								
<b>Employer Contributions &amp; Payroll Taxes</b>	\$	2,900	\$	0	\$	2,900		
Other Advances		1,681		0		1,681		
Advances, HRSTF Cashout		2,414		0		2,414		
Deferred HRSTF Cashout		437		0		437		
Resources Payable to Treasury		61		0		61		
Superfund - Non-Current								
Unfunded FECA Liability		0		1,355		1,355		
Total Superfund	\$	7,493	\$ <u></u>	1,355	\$_	8,848		
All Other - Current								
<b>Employer Contributions &amp; Payroll Taxes</b>	\$	12,690	\$	0	\$	12,690		
WCF Advances		6,510		0		6,510		
Other Advances		3,638		0		3,638		
Liability for Deposit Funds		(20)		0		(20)		
Resources Payable to Treasury		(33)		0		(33)		
All Other - Non-Current								
Unfunded FECA Liability		0		6,064	_	6,064		
Total All Other	\$	22,785	\$	6,064	\$	28,849		

Other Liabilities - Non-Federal	Covered Budgetary R		Not Covered by Budgetary Resources			<u>Total</u>	
Superfund - Current							
Accrued Funded Payroll and Benefits	\$	7,499	\$	0	\$	7,499	
Accrued Funded Annual Leave		5,777		0		5,777	
Payroll Check Cancellation Liability		3		0		3	
Unearned Advances, Non- Federal		30,192		0		30,192	
Accrued Unfunded Annual Leave		0		19,553		19,553	
Total Superfund	\$	43,471	\$	19,553	\$	63,024	
Other Liabilities - Non-Federal	ities - Non-Federal Covered by Not Covered by <u>Budgetary Resources</u> <u>Budgetary Resources</u>		v	r	<u> Fotal</u>		
All Other - Current		_					
Accrued Funded Payroll and Benefits	\$	32,570	\$	0	\$	32,570	
Withholdings Payable		25,278		0		25,278	
Accrued Funded Annual Leave		320		0		320	
Payroll Check Cancellation Liability		44		0		44	
Unearned Advances, Non- Federal		4,729		0		4,729	
Liability for Deposit Funds		6,833		0		6,833	
Accrued Unfunded Annual Leave		0		93,151		93,151	
All Other - Non-Current							
Capital Lease Liability		0		37,585		37,585	
Total All Other	\$	69,774	\$	130,736	\$	200,510	

#### Note 13. Leases

The Capital Leases as of September 30, 2000, consist of the following:

#### **Capital Leases:**

Summary of Assets Under Capital Lease:	All Others
Land, Buildings and Personal Property	\$ 40,992
Accumulated Amortization	\$ <u>11,463</u>

EPA has three capital leases for land and buildings housing scientific laboratories and/or computer facilities. All of these leases include a base rental charge and escalator clauses based upon either rising operating costs and/or real estate taxes. The base operating costs are adjusted annually according to escalators in the Consumer Price Indices published by the Bureau of Labor Statistics (U.S. Department of Labor). EPA has one capital lease for a xerox copier, at a net present value of \$78 thousand, that expires in FY 2002. The three real property leases terminate in fiscal years 2010, 2013 and 2025. The charges are expended out of the Environmental Programs and Management (EPM) appropriation. The total future minimum lease payments of the capital leases are listed below.

Future Payments Due:		<b>All Others</b>
Fiscal Year		
2001	\$	6,314
2002		6,303
2003		6,295
2004		6,295
2005		6,295
After 5 Years	_	96,194
Total Future Minimum Lease Payments		127,696
Less: Imputed Interest	_	(90,111)
Net Capital Lease Liability	\$_	37,585
Liabilities not Covered by Budgetary Resources (See Note 10)	\$ <u></u>	37,585

#### **Operating Leases:**

The General Services Administration (GSA) provides leased real property (land and buildings) as office space for EPA employees. GSA charges a Standard Level Users Charge that approximates the commercial rental rates for similar properties.

EPA has five direct operating leases for land and buildings housing scientific laboratories and/or computer facilities during FY 2000. In FY 2000 EPA also entered into a one year lease for the dockage of EPA's research vessel "Peter W. Anderson" and warehouse storage of equipment that expires May 31, 2001. Most of these leases include a base rental charge and escalator clauses based upon either rising operating costs and/or real estate taxes. The base operating costs are adjusted annually according to escalators in the Consumer Price Indices published by the Bureau of Labor Statistics (U.S. Department of Labor). One of these leases, which expired on September 30, 2000, was succeeded by a GSA lease agreement for the same space. Two of these leases, which were to terminate during FY 2000, were extended to fiscal years 2002 and 2020. In fiscal year 1997 and 1998, EPA entered into two leases, which terminate in fiscal 2017 and 2003 respectively. The charges are expended out of the EPM appropriation. The total minimum future costs of operating leases are listed below.

Fiscal Year	Sur	<u>erfund</u>	<u>A</u>	ll Others		tal Land Buildings
2001	\$	0	\$	5,427	\$	5,427
2002		0		2,082		2,082
2003		0		84		84
2004		0		74		74
2005		0		74		74
Beyond 2006		0		994		994
Total Future Minimum Lease Payments	\$	0	\$ <u> </u>	8,735	\$ <u></u>	8,735

#### Note 14. Pension and Other Actuarial Liabilities

FECA provides income and medical cost protection to covered Federal civilian employees injured on the job, employees who have incurred a work-related occupational disease, and beneficiaries of employees whose death is attributable to a job-related injury or occupational disease. Annually, EPA is allocated the portion of the long term FECA actuarial liability attributable to the entity. The liability is calculated to estimate the expected liability for death, disability, medical and miscellaneous costs for approved compensation cases. The liability amounts and the calculation methodologies are provided by DOL.

The FECA Actuarial Liability at September 30, 2000, consisted of the following:

	<b>Superfund</b>		All Other
FECA Actuarial Liability	\$ <u>6,637</u>	\$_	27,036

The FY 2000 present value of these estimates was calculated using a discount rate of 5.5 percent in year 1 and 2, 5.55 percent in year 3 and 5.6 percent in year 4 and thereafter. The estimated future costs are recorded as an unfunded liability.

#### Note 15. Cashout Advances and Deferrals, Superfund

Cashouts are funds received by EPA, a state, or another Potentially Responsible Party under the terms of a settlement agreement (e.g., consent decree) to finance response action costs at a specified Superfund site. Under CERCLA Section 122(b)(3), cashout funds received by EPA are placed in site-specific, interest bearing accounts known as special accounts and are used in accordance with the terms of the settlement agreement. Funds placed in special accounts may be used without further appropriation by Congress.

#### **Note 16. Unexpended Appropriations**

As of September 30, 2000, the Unexpended Appropriations consisted of the following:

<b>Unexpended Appropriations:</b>	<b>Superfund</b>		<b>All Others</b>		<u>Total</u>
Unobligated					
Available	\$ 0	\$	1,518,675	\$	1,518,675
Unavailable	0		83,396		83,396
Undelivered Orders	 0		8,517,767	_	8,517,767
Total	\$ 0	\$_	10,119,838	\$_	10,119,838

#### **Note 17. Amounts Held by Treasury**

Amounts Held by Treasury for Future Appropriations consists of amounts held in trusteeship by the U.S. Department of Treasury in the "Hazardous Substance Superfund Trust Fund" (Superfund) and the "Leaking Underground Storage Tank Trust Fund" (LUST).

#### Superfund (Audited)

Superfund is supported primarily by an environmental tax on corporations, cost recoveries of funds spent to clean up hazardous waste sites, and fines and penalties. Prior to December 31, 1995, the fund was also supported by other taxes on crude and petroleum and on the sale or use of certain chemicals. The authority to assess those taxes and the environmental tax on corporations also expired on December 31, 1995, and has not been renewed by Congress. It is not known if or when such taxes will be reassessed in the future.

The following reflects the Superfund Trust Fund maintained by the U.S. Department of Treasury as of September 30, 2000. The amounts contained in these statements have been provided by the Treasury and are audited. Outlays represent amounts received by EPA's Superfund Trust Fund; such funds are eliminated on consolidation with the Superfund Trust Fund maintained by Treasury.

		<b>EPA</b>		<b>Treasury</b>		<u>Combined</u>
<b>Undistributed Balances</b>						
Available for Investment	\$	0	\$	1,986	\$	1,986
Unavailable for Investment	_	0		0		0
Total Undisbursed Balance		0		1,986		1,986
Interest Receivables		0		43		43
Investments, Net of Discounts		2,770,969		1,189,301		3,960,270
Total Assets	\$	2,770,969	\$	1,191,330	\$	3,962,299
Liabilities & Equity	_		_		_	
Debt	\$	0	\$	0	\$	0
Equity		2,770,969		1,191,330		3,962,299
Total Liability and Equity	\$	2,770,969	\$	1,191,330	\$	3,962,299
Receipts	_		_		_	
Petroleum-Imported	\$	0	\$	176	\$	176
Petroleum-Domestic		0		2		2
Crude and Petroleum		0		(561)		(561)
Certain Chemicals		0		2,166		2,166
Imported Substances		0		606		606
Corporate Environmental		0		2,679		2,679
Cost Recoveries		0		230,508		230,508
Fines & Penalties	_	0		725	_	725
Total Revenue		0		236,301		236,301
Appropriations Received		0		700,000		700,000
Interest Income	_	0	_	235,740	_	235,740
Total Receipts	_	0	_	1,172,041	_	1,172,041
Outlays						
Transfers to EPA	_	1,628,891	_	(1,628,891)	_	0
Total Outlays	_	1,628,891	_	(1,628,891)	_	0
Net Income	\$_	1,628,891	\$_	(456,850)	\$_	1,172,041

#### LUST (Audited)

LUST is supported primarily by a sales tax on motor fuels to clean up LUST waste sites. The following represents LUST Trust Fund as maintained by the U.S. Department of Treasury. The amounts contained in these statements have been provided by Treasury and are audited. Outlays represent appropriations received by EPA's LUST Trust Fund; such funds are eliminated on consolidation with the LUST Trust Fund maintained by Treasury.

	<b>EPA</b>		<b>Treasury</b>	9	<u>Combined</u>
<b>Undistributed Balances</b>					
Available for Investment	\$ 0	\$	(725)	\$	(725)
Unavailable for Investment	 0	_	0	_	0
Total Undisbursed Balance	0		(725)		(725)
Taxes Receivable	0		221		221
Interest Receivables	 0	_	26	_	26
Investments, Net of Discounts	86,283		1,506,348		1,592,631
<b>Total Assets</b>	\$ 86,283	\$	1,505,870	\$	1,592,153
Liabilities & Equity					
Accrued Liabilities	\$ 0	\$	2,892	\$	2,892
Equity	 86,283		1,502,978		1,589,261
<b>Total Liability and Equity</b>	\$ 86,283	\$_	1,505,870	\$	1,592,153
Receipts					
Highway TF Tax	\$ 0	\$	172,659	\$	172,659
Airport TF Tax	0		16,380		16,380
Inland TF Tax	0		612		612
Audit Adjustment	 0	_	(1,710)		(1,710)
Gross Revenue	0		187,941		187,941
Less: Reimbursement to					
General Fund	 0	_	(6,625)	_	(6,625)
Net Revenue	0		181,316		181,316
Interest Income	 0		78,956		78,956
Net Receipts	0	_	260,272		260,272
Outlays					
Transfers to EPA	 65,718	_	(65,718)		0
Total Outlays	65,718	_	(65,718)		0
Net Income	\$ 65,718	\$	194,554	\$	260,272

#### **Note 18. Commitments and Contingencies**

EPA is a party in various administrative proceedings, legal actions and claims brought by or against it. These include:

- Various personnel actions, suits, or claims brought against the Agency by employees and others.
- Various contract and assistance program claims brought against the Agency by vendors, grantees and others.
- The legal recovery of Superfund costs incurred for pollution cleanup of specific sites, to include the collection of fines and penalties from responsible parties.
- Claims against recipients for improperly spent assistance funds which may be settled by a reduction of future EPA funding to the grantee or the provision of additional grantee matching funds.

#### Superfund

Under CERCLA +106(a), EPA issues administrative orders that require parties to clean up contaminated sites. CERCLA +106(b) allows a party that has complied with such an order to petition EPA for reimbursement from the Fund of its reasonable costs of responding to the order, plus interest. To be eligible for reimbursement, the party must demonstrate either that it was not a liable party under CERCLA +107(a) for the response action ordered, or that the Agency's selection of the response action was arbitrary and capricious or otherwise not in accordance with law.

There are currently nine CERCLA +106(b) administrative claims and four pending lawsuits. If the claimants are successful, the total losses on the administrative and judicial claims could amount to approximately \$32.6 million and \$5.7 million, respectively. The Environmental Appeals Board has not yet issued final decisions on the administrative claims; therefore, a definite estimate of the amount of the contingent loss cannot be made. The claimants' chance of success in all nine of these outstanding claims is characterized as reasonably possible. The claimants' chance of success in three of the four pending lawsuits is also reasonably possible. The outcome of the remaining lawsuit is considered remote.

There are a number of outstanding CERCLA +106(a) cleanup orders where the recipients of the orders have not yet completed the ordered response actions. Each such recipient could potentially file a claim with EPA for reimbursements under CERCLA +106(b) of its costs of responding to the order once it has completed the ordered actions.

EPA is responsible to indemnify response action contractors (CERCLA +119) for legal costs that will eventually exceed, or have exceeded, the deductible specified in the current indemnification agreements. Such payments by the United States would be recoverable government response costs. EPA has only one claim, which is considered remote.

EPA contractors have submitted response action contractor claims. No claims were material.

#### All Other

There were no material litigation, asserted or unasserted claims or assessments involving all other appropriated funds of the Agency.

#### Judgement Fund

In cases that are paid by the U.S. Treasury Judgement Fund, the Agency must recognize the full cost of a claim regardless of who is actually paying the claim. Until these claims are settled or a court judgement is assessed and the Judgement Fund is determined to be the appropriate source for the payment, claims that are probable and estimable must be recognized as an expense and liability of the agency. For these cases, at the time of settlement or judgement, the liability will be reduced and an imputed financing source recognized. See Interpretation of Federal Financial Accounting Standards No. 2, Accounting for Treasury Judgement Fund Transactions.

As of September 30, 2000, \$5 million of Superfund related claims and \$2.9 million of All Other funds' claims were accrued as contingent liabilities under these criteria.

In addition, EPA is party to certain pending litigation upon which EPA believes it has a reasonable legal position. \$336.1 million of Judgement Fund claims in addition to the above accrued amounts are pending.

In the opinion of EPA's management and General Counsel, the ultimate resolution of any legal actions still pending will not materially affect EPA's operations or financial position.

#### Note 19. Grant Accrual

The EPA has revised the methodology for calculating the accrued grant expense for the fiscal year 2000 financial statements. The methodology uses a model based upon historical grant obligations and the related payment incurred the succeeding years. The model calculates a "what should be disbursed amount" vs. the actual disbursements made in the year. The accrual amount is derived from the results of this model combined with an additive factor which considers the ratio of accruals to disbursements for the last two fiscal years. The accrual for Superfund is \$43.0 million and the All Other grant accrual is \$507.6 million. In the Statement of Net Cost by Goal, the grant accrual amounts are included in "Not Assigned to Goals."

#### Note 20. Environmental Cleanup Costs

EPA has four sites that require clean up stemming from its activities. Three of these sites will be paid from the Treasury Judgement fund amounting to \$32 thousand. EPA estimates that clean up on the remaining site will be approximately \$10 thousand. EPA also holds title to a site in Edison, New Jersey, which was formerly an Army Depot. While EPA did not cause the contamination, the Agency could potentially be liable for a portion of the cleanup costs. However, it is expected that the Department of Defense and the General Services Administration will bear all or most of the cost of remediation.

#### **Accrued Cleanup Cost**

EPA has fourteen sites that will require future clean up associated with permanent closure. The estimated cost will be approximately \$15.5 million. Since the cleanup costs associated with permanent closure are not primarily recovered through user fees, EPA has elected to recognize the estimated total cleanup cost as a liability upon implementation and record changes to the estimate in subsequent years. The FY 2000 estimate for unfunded cleanup costs decreased by \$128 thousand from the FY 1999 estimate. There was an increase of approximately \$1.3 million for funded cleanup costs for FY 2000. EPA also could be potentially liable for cleanup costs at a GSA-leased site; however, the amounts are not known. Of the \$15.5 million in estimated cleanup costs, approximately \$10.9 million represents the estimated expense to close the current RTP research facility. These costs will be incurred within the next three years. The remaining amount represents the future decontamination and decommissioning costs of EPA's other research facilities.

#### Note 21. Superfund State Credits

Authorizing statutory language for Superfund and related Federal regulations require States to enter into Superfund State Contracts (SSCs) when EPA assumes the lead for a remedial action in their State. The SSC defines the State's role in the remedial action and obtains the State's assurance that they will share in the cost of the remedial action. Under Superfund's authorizing statutory language, States will provide EPA with a ten percent cost share for remedial action costs incurred at privately owned or operated sites, and at least fifty percent of all response activities (i.e., removal, remedial planning, remedial action, and enforcement) at publicly operated sites. In some cases, States may use EPA approved credits to reduce all or part of their cost share requirement that would otherwise be borne by the States. Credit is limited to State site-specific expenses EPA has determined to be reasonable, documented, direct out-of-pocket expenditures of non-Federal funds for remedial action. Once EPA has reviewed and approved a State's claim for credit, the State must first apply the credit at the site where it was earned. The State may apply any excess/remaining credit to another site when approved by EPA. As of September 30, 2000, total remaining State credits have been estimated at \$12.6 million.

#### Note 22. Superfund Preauthorized Mixed Funding Agreements

Under Superfund preauthorized mixed funding agreements, potentially responsible parties (PRPs) agree to perform response actions at their sites with the understanding that EPA will reimburse the PRPs a certain percentage of their total response action costs. EPA's authority to enter into mixed funding agreements is provided under Section 111(a)(2) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980. Under Section 122(b)(1) of CERCLA, as amended by the Superfund Amendments and Reauthorization Act (SARA)

of 1986, a PRP may assert a claim against the Superfund Trust Fund for a portion of the costs they incurred while conducting a preauthorized response action agreed to under a mixed funding agreement. As of September 30, 2000, EPA had 12 outstanding preauthorized mixed funding agreements with obligations totaling \$40.2 million. A liability is not recognized for these amounts until all work has been performed by the PRP and has been approved by EPA for payment. Further, EPA will not disburse any funds under these agreements until the PRP's application, claim, and claims adjustment processes have been reviewed and approved by EPA.

#### Note 23. Income and Expenses from other Appropriations

The Statement of Net Cost reports program costs that include the full costs of the program outputs and consist of the direct costs and all other costs that can be directly traced, assigned on a cause and effect basis, or reasonably allocated to program outputs.

During Fiscal Year 2000, EPA had three appropriations which funded a variety of programmatic and non-programmatic activities across the Agency, subject to statutory requirements. The Environmental Programs and Management (EPM) appropriation was created to fund personnel compensation and benefits, travel, procurement, and contract activities. Two prior year appropriations, Program and Research Operations (PRO) and Abatement Control and Compliance (AC&C) generated expenses. PRO funded travel, personnel compensation and benefits. AC&C funded procurement and contract activities.

All of the expenses from EPM, PRO and AC&C were distributed among EPA's two Reporting Entities: Superfund and All Others. This distribution is calculated using a combination of specific identification of expenses to Reporting Entities, and a weighted average that distributes expenses proportionately to total programmatic expenses.

As illustrated below, this estimate does not impact the net effect of the Statement of Net Costs.

	Income	From	Expense			
	Other Appr	<u>opriations</u>	Other Appr	Net Effect		
Superfund	\$	31,270	\$	(31,270)	\$	0
All Others		(31,270)		31,270		0
Total	\$	0	\$	0	\$	0

#### Note 24. Custodial Non-Exchange Revenues

EPA uses the accrual basis of accounting for the collection of fines, penalties and miscellaneous receipts. Collectibility by EPA of the fines and penalties is based on the responsible parties' willingness and ability to pay.

Fines, Penalties and Other Misc Revenue (EPA)	\$ <u></u>	86,590
Accounts Receivable for Fines, Penalties and Other Miscellaneous Receipts		
Accounts Receivable	\$	154,803
Less: Allowance for Doubtful Accounts	_	52,336
Total	\$	102,467

#### Note 25. Statement of Budgetary Resources

A reconciliation of budgetary resources, obligations incurred, and outlays, as presented in the audited Statement of Budgetary Resources, to amounts included in the Budget of the United States Government for the year ended September 30, 2000, is as follows:

	Budgetary Resources		Obligations <u>Incurred</u>			<u>Outlays</u>
<u>Superfund</u>						·
Statement of Budgetary Resources	\$	2,151,875	\$	1,701,337	\$	1,526,587
Adjustments to Unliquidated Obligations, Unfilled Customer Orders and Other	_	(328)	_	(1,744)	_	1,000
<b>Budget of the United States Government</b>	\$	2,151,547	\$	1,699,593	\$	1,527,587
All Other						
Statement of Budgetary Resources	\$	8,932,823	\$	7,158,665	\$	6,602,265
Less: Funds Reported by Other Federal						
Entities		(24,778)		(23,835)		(24,545)
Adjustments to Unliquidated Obligations, Unfilled Customer Orders and Other	_	66,618	_	67,907		57
<b>Budget of the United States Government</b>	\$	8,974,663	\$	7,202,737	\$	6,577,777

#### Note 26. Adjustments

For the Superfund Trust Fund this amount represents recoveries of prior year obligations of \$201,660 thousand less \$2,288 thousand in canceled authority. For All Others, this amount represents recoveries of prior year obligations of \$111,767 thousand and \$615 thousand of other adjustments to beginning unobligated balances, less rescinded authority of \$28,848 thousand, and \$55,687 thousand in canceled authority.

#### Note 27. Unobligated Balances Available

The Superfund Trust Fund has an unobligated balance of \$449,538 thousand in unexpired authority and \$1 million in expired authority. All Others has an unobligated balance of \$1,644,998 thousand in unexpired authority and \$129,160 thousand in expired authority. The unexpired authority is available to be apportioned by the Office of Management and Budget for new obligations at the beginning of FY 2001. Expired authority is available for upward adjustments of obligations incurred as of the end of the fiscal year.

#### Note 28. Obligated Balance, Net - End of Period

Undelivered Orders, unpaid, at the end of the period are \$2,091,767 thousand for the Superfund Trust Fund and \$8,657,913 thousand for All Others.

#### Note 29. Difference in Outlays Between Statement of Budgetary Resources and SF-133

Outlays between the Statement of Budgetary Resources and the SF-133 differ by \$1 million for Superfund, due to an advance that was refunded and reported on the SF-133 last year but not recorded and reported on the Statement of Budgetary Resources until this year.

#### Note 30. Statement of Financing

Increases in Unfunded Liabilities relate to changes in unfunded annual leave, environmental liabilities, contingent liabilities and the Federal Employees Compensation Act (FECA) special benefit fund. For Superfund and All Others, the changes totaled \$7.0 million and \$12.3 million, respectively and are reflected in Financing Sources Yet to Be Provided.

#### Note 31. Beginning Unobligated Balances - All Other Statement of Budgetary Resources

All Others in the Statement of Budgetary Resource contained some previously canceled funds in the beginning unobligated balance brought forward from FY 1999. The amounts from canceled funds were approximately \$16.2 million. These balances have been eliminated this year in the Adjustments on the Statement of Budgetary Resources.

#### Note 32. Change in Accounting for Trust Funds

During FY 2000, in compliance with Statement of Federal Financial Accounting Standard No. 7 (Accounting for Revenue and Other Financing Sources), the U. S. Standard General Ledger Board issued definitive guidance for trust fund accounting and added new Standard General Ledger accounts to further distinguish trust fund transactions from other funds. The EPA implemented these changes for all trust funds. These changes eliminate the use of Unexpended Appropriations and Appropriations Used for trust funds, and indicate the inclusion of only the Cumulative Results of Operations account in Net Position for trust funds.

The changes affect transactions in this manner: In lieu of increases to Unexpended Appropriations, amounts appropriated or transferred to the trust funds are recorded in new accounts as Trust Fund Financing Sources-Transfers In. Amounts transferred out no longer decrease Unexpended Appropriations, but are recorded in new accounts as Trust Fund Financing Sources -Transfers Out. These new accounts are reported on the Statement of Changes in Net Position as Other Financing Sources, and are closed out at year end to Cumulative Results of Operations. Expenditures from trust funds are still reported as expenses or purchases of capital assets and reflected in budgetary expenditures, but are no longer reported as increases to Appropriations Used and decreases to Unexpended Appropriations.

The cumulative effect of these changes on the accounts was to move all prior year's balances in Unexpended Appropriations for trust funds into Cumulative Results of Operations. This cumulative effect is reported on a separate line on the Statement of Changes in Net Position this fiscal year. The decreases to Unexpended Appropriations for trust funds are detailed below:

		<u>Superfund</u>	<u>A</u>	<u> II Other</u>
Hazardous Substance Superfund No-Year Trust Fund	\$	2,607,783	\$	0
Superfund Annual Funds		49,048		0
Leaking Underground Storage Tank Trust Fund		0		81,830
Oil Spill Response Trust Fund		0		9,690
Miscellaneous Contributed Funds Trust Fund	_	0	_	76
Totals	_	\$2,656,831	_	\$91,596

#### Note 33. Costs Not Assigned to Goals

On the Statement of Net Cost by Goal, \$145.5 million in gross costs were not assigned to goals. This amount was comprised of a \$106.4 million increase to the year-end grant accruals, \$15.2 million in unfunded expenses, \$19.9 million in depreciation expenses that were not assigned, \$3.0 million in bad debt expense, and \$1 million in miscellaneous expenses.

#### Note 34. Transfers-in and out, Statement of Changes in Net Position

The consolidated amounts shown as transfers-in on the Statement of Changes in Net Position are comprised of transfers from other Federal agencies in accordance with applicable legislation. The consolidated amounts shown as transfers-out are nonexpenditure transfers to other Hazardous Substance Superfund allocation agency funds, such as HHS and Labor.

#### **Note 35. Imputed Financing**

In accordance with Statement of Federal Financial Accounting Standard No. 5 (Liabilities of the Federal Government), Federal agencies must recognize the portion of employees' pensions and other retirement benefits to be paid by the Office of Personnel Management (OPM) trust funds. Theses amounts are recorded as imputed costs and imputed financing for the agency. Each year the OPM provides federal agencies with cost factors to calculate these imputed costs and financing that apply to the current year. These cost factors are multiplied by the current year's salaries or number of employees, as applicable, to provide an estimate of the imputed financing that the OPM trust funds will provide for each agency.

#### Note 36. Change in Accounting for Cashout Interest, Superfund

Per an agreement dated October 3, 1996 between the Office of Management and Budget (OMB) and the EPA, the EPA is allowed additional budget authority for interest earnings on Cashout (Special Account) collections for Superfund. The authority for interest earnings had previously been classified as Cashout Advances and Deferrals, Superfund, on the Consolidating Balance Sheet and as Spending Authority from Offsetting Collections on the Combined Statement of Budgetary Resources . In FY 2000, the beginning balance for interest earnings on Special Accounts was reclassified from Cashout Advances and Deferrals, Superfund to Net Position on the Consolidating Balance Sheet for Superfund. The change is consistent with guidance from OMB to treat the interest as permanently appropriated and is consistent with definitive guidance for trust fund accounting issued by the U. S. Standard General Ledger Board. This change is also in compliance with Statement of Federal Financial Accounting Standard No. 7 (Accounting for Revenue and Other Financing Sources).

For FY 2000, interest earnings that became available during the fiscal year are recorded in Trust Fund Financing Sources - Transfers In for EPA, and are then eliminated against Treasury's Transfers-Out in the consolidation of the Treasury and EPA funds. The current year's earnings are included as Budget Authority on the Combined Statement of Budgetary Resources for Superfund.

The amount available as of September 30, 2000 for Cashout Interest authority is as follows:

	Sı	uperfund
Cashout Interest reclassified from Cashout Advances and Deferrals, Superfund, October 1, 1999	\$	85,382
Cashout Interest Authority Accrued FY 2000		21,670
Less: FY 2000 Drawdown of Authority		(780)
Total	\$	106,272

# Environmental Protection Agency Required Supplemental Information As of September 30, 2000 (Dollars in Thousands) (Unaudited)

#### **Deferred Maintenance**

The EPA classifies property, plant, and equipment as follows: 1) EPA-Held Equipment, 2) Contractor-Held Equipment, 3) Land and Buildings, and, 4) Capital Leases. The condition assessment survey method of measuring deferred maintenance is utilized. The Agency adopts requirements or standards for acceptable operating condition in conformance with industry practices. No deferred maintenance was reported for any of the four categories.

#### **Intragovernmental Assets**

Intragovernmental amounts represent transactions between all federal departments and agencies and are reported by trading partner (entities that EPA did business with during FY 2000).

EPA confirmed its investment balances with the Bureau of the Public Debt, the Department of the Treasury. In addition, EPA sent out requests to trading partners to reconcile and confirm intragovernmental receivables and advances. Data was received from the Department of Defense, Department of Energy, and Tennessee Valley Authority. (The Department of Defense includes the Navy, Army, and Air Force.) The U.S. Army Corps of Engineers was not able to give us detailed data to be able to reconcile asset balances.

Trading	•	Invest	ments	Accounts	Receivable	Otl	ıer
Partner <u>Code</u>	<u>Agency</u>	<b>Superfund</b>	All Other	Superfund	All Other	Superfund	All Other
04	Government Printing Office	\$ 0	\$ 0	\$ 0	\$ 43	\$ 65	\$ 7,409
12	Department of Agriculture			355	146		
13	Department of Commerce				48		
14	Department of Interior			13,521			
15	Department of Justice			80			
17	Department of the Navy				248		
18	U. S. Postal Service						43
19	Department of State				70		
20	Department of the Treasury	3,960,313	1,593,357		222		
21	Department of the Army			7,798			
31	US Nuclear Regulatory Commission				20		
47	General Services Administration			12			
57	Department of the Air Force				223		
58	Federal Emergency Management Agency				1,205		
61	Consumer Product Safety Commission				8		
64	Tennessee Valley Authority				607		

Trading	,	Investments	Accounts	Receivable	Otl	ner
Partner <u>Code</u>	r <u>Agency</u>	Superfund All Other	Superfund	All Other	Superfund	All Other
68	EPA (between Superfund and All Other)			4,191	6,510	
69	Department of Transportation			10,378		
75	Department of Health and Human Services			415		
86	Department of Housing and Urban Development			943		
93	Federal Mediation and Conciliation Service			19		
96	US Army Corps of Engineer			1,022	15,850	
97	US Department of Defense		10,769	1,217		
00	Unassigned	00	8,136	13,346	(636)	0
Total		\$3,960,313 \$1,593,357	<u>\$40,671</u>	<u>\$34,371</u>	<u>\$21,789</u>	<u>\$7,452</u>

#### **Intragovernmental Liabilities**

EPA received a few requests for intragovernmental liabilities reconciliation from trading partners. EPA was able to confirm balances with the National Science Foundation (49), the Office of Personnel Management (24), the Department of the Treasury (20), and the Department of Labor (16). However, some agencies' requests did not have the data (such as interagency agreement numbers) that EPA needed to do the research.

Trading		Acc	ounts	Pay	able	Acc	crued I	Liab	ilities	Oth	er Li	abil	ities
Partner <u>Code</u>	r <u>Agency</u>	Supe	rfund	All	Other	Sup	erfund	All	Other	Superf	und	All	Other
03	Library of Congress	\$	0	\$	0	\$	11	\$	181	\$	0	\$	0
04	Government Printing Office		4		16		61		988				
11	Executive Office of the President								40				
12	Department of Agriculture						39		876		711		1,615
13	Department of Commerce		1,021				393		2,286				152
14	Department of Interior		901				3,440		2,711				36
15	Department of Justice		617				5,896		186		578		
16	Department of Labor		2,258				73		24	1	,355		6,064
17	Department of the Navy										355		
18	<b>United States Postal Service</b>						9						
19	Department of State						5		1,152				
20	Department of the Treasury						13		3,014		742		2,945
21	Department of the Army								2		503		
24	Office of Personnel Management						56		488	1	,865		8,162
31	US Nuclear Regulatory Commission						1		9				20
33	Smithsonian Institution								33				

Trading Partner		Accounts	Payable	Accrued I	Liabilities	Other Li	abilities
Code	<u>Agency</u>	<b>Superfund</b>	All Other	<b>Superfund</b>	All Other	<b>Superfund</b>	All Other
47	General Services Administration			4,618	23,935		
49	National Science Foundation	l		10	234		
56	Central Intelligence Agency				37		
57	Department of the Air Force					1,256	
58	Federal Emergency Management Agency	15,395		6			
59	National Foundation on the Arts and the Humanities			5			
63	National Labor Relations Board				1		
64	Tennessee Valley Authority			1	112		50
68	EPA (between Superfund and All Others)			4,191			6,510
69	Department of Transportation			1,558	364		
72	Agency for International Development						
73	Small Business Administration				34		
75	Department of Health and Human Services	51,841		8,791	6,440		
80	National Aeronautics and Space Administration	- ,-		-,	231		
86	Department of Housing and Urban Development				201		2,922
88	National Archives & Records Administration				1		<b>,-</b>
89	Department of Energy			490	4,032		14
91	Department of Education				3		
95	Independent Agencies			28	11		
96	US Army Corps of						
	Engineers	1,202	694	21,357	1,136		314
97	Office of the Secretary of						
	Defense	339	140	715	830		52
00	Unassigned	1,889	656	(19)	1,189	1,483	<u>(7)</u>
Total		<u>\$75,467</u>	<u>\$1,506</u>	<u>\$51,748</u>	<u>\$50,580</u>	<u>\$8,848</u>	<u>\$28,849</u>

For other intragovernmental liabilities, \$37,922 thousand in Debt and \$102,469 thousand in Custodial Liability is assigned to the Department of the Treasury (trading partner Code 20).

## **Intragovernmental Revenues and Costs**

EPA's intragovernmental earned revenues are not reported by trading partners because they are below OMB's threshold of \$500 million.

	Superfund	All Others
Intragovernmental Earned Revenue	(\$2,249)	\$63,240
Associated Costs to generate Above Revenue		
(Budget Functional Classification 300)	(2,249)	63,240

# **Environmental Protection Agency Required Supplemental Information Supplemental Statement of Budgetary Resources** As of September 30, 2000 (Dollars in Thousands)

#### Unaudited

		Environmental				Miscellaneous	
	STAG	Programs & Management	Science & Technology	FIFRA	LUST Trust Fund	All I Others	All Others
Budgetary Resources:			<u> </u>		114011444		0 0.000
Budget Authority	\$ 3,469,250	\$ 1,899,021	\$ 647,500	\$ 0	\$ 70,000	\$ 834,235	\$ 6,920,006
Unobligated Balances - Beginning of the Period	1,265,880	219,803	159,175	11,552	3,570	14,695	1,674,675
Net Transfers, Prior Year Balance	0		0	0		) (977)	(977)
Spending Authority from Offsetting Collections	13,489	48,345	45,490	18,593	3 42	2 185,313	311,272
Adjustments	52,088	(1,730)	(4,434)	(2,228)	1,472	2 (17,321)	27,847
Total Budgetary Resources	\$ <u>4,800,707</u>	\$ 2,165,439	\$ 847,731	\$ 27,917	\$ 75,08 <sup>4</sup>	1 \$ 1,015,945	\$ 8,932,823
Status of Budgetary Resources:							
Obligations Incurred	\$ 3,582,074	\$ 1,894,522	\$ 667,581	\$ 23,321	\$ 70,755	3 \$ 920,414	\$ 7,158,665
Unobligated Balances - Available	1,218,633	171,276	154,864	4,596	4,24	91,384	1,644,998
Unobligated Balances-Not Available	0	99,641	25,286	C	86	3 4,147	129,160
Total Status of Budgetary Resources	\$ 4,800,707	\$ 2,165,439	\$ 847,731	\$ 27,917	\$ 75,084	1,015,945	\$ 8,932,823
Outlays:							
Obligations Incurred	\$ 3,582,074	\$ 1,894,522	\$ 667,581	\$ 23,321	\$ 70,755	3 \$ 920,414	\$ 7,158,665
Less: Spending Authority from Offsetting Collections and	86,462	75,206	49,444	16,366	2,108	3 190,603	420,189
Obligated Balance, Net - Beginning of the Period	7,570,173	796,486	511,949	(926)	79,300	3 196,245	9,153,233
Less: Obligated Balance, Net - End							
of the Period	7,874,156	750,109	500,950	1,544	83,970	78,709	9,289,444
Total Outlays	\$ 3,191,629	\$ 1,865,693	\$ 629,136	\$ 4,485	\$ 63,975	5 \$ 847,347	\$ 6,602,265

# Environmental Protection Agency Required Supplemental Information Working Capital Fund Supplemental Balance Sheet As of September 30, 2000 (Dollars in Thousands)

ASSETS	Unaudited
Intragovernmental:	
Fund Balance With Treasury	\$ 52,509
Accounts Receivable, Net	28,702
Other	47
Total Intragovernmental	81,258
Inventory and Related Property, Net	46
General Property, Plant and Equipment, Net	9,646
Other	1_
Total Assets	<b>\$</b> 90,951
LIABILITIES	
Intragovernmental:	
Other	\$ 47,555
Total Intragovernmental	47,555
Accounts Payable	2,578
Other	19,034
Total Liabilities	69,167
NET POSITION	
Cumulative Results of Operations	21,784
Total Net Position	21,784
Total Liabilities and Net Position	\$ 90,951

# Environmental Protection Agency Required Supplemental Information Working Capital Fund Supplemental Statement of Net Cost For the Year Ended September 30, 2000 (Dollars in Thousands)

	Unaudited	
COSTS:		
Intragovernmental	\$	8,154
With the Public		114,718
Total Costs		122,872
Less:		
Earned Revenues		(117,079)
Net Cost of Operations	\$	5,793

# Environmental Protection Agency Required Supplemental Information Working Capital Fund Supplemental Statement of Changes in Net Position For the Year Ended September 30, 2000 (Dollars in Thousands)

	Un	audited
Net Cost of Operations	\$	5,793
Financing Sources (Other Than Exchange Revenues):		
Imputed Financing		5,397
Transfers-In		439
Transfers-Out		(439)
Net Results of Operations		(396)
Prior-Period Adjustments		(8,961)
Net Change in Cumulative Results of Operations		(9,357)
Net Position - Beginning of the Period		31,141
Net Position - End of the Period	\$	21,784

# **Environmental Protection Agency Required Supplemental Information Working Capital Fund Supplemental Statement of Budgetary Resources** For the Year Ended September 30, 2000 (Dollars in Thousands)

<b>Budgetary Resources</b>	<u>Un</u>	audited
Unobligated Balances, Beginning of the Period	\$	6,941
Spending Authority from Offsetting Collections		136,065
Total Budgetary Resources	\$	143,006
<b>Status of Budgetary Resources</b>		
Obligations Incurred	\$	121,186
Unobligated Balances Available		21,820
Total, Status of Budgetary Resources	\$	143,006
Outlays		
Obligations Incurred	\$	121,186
Less: Spending Authority from Offsetting Collections and		
Adjustments		(136,065)
Subtotal		(14,879)
Obligated Balance, Net - Beginning of the Period		30,124
Less: Obligated Balance, Net - End of the Period		(30,688)
<b>Total Outlays</b>	\$	(15,443)

# Environmental Protection Agency Required Supplemental Information Working Capital Fund Supplemental Statement of Financing For the Year Ended September 30, 2000 (Dollars in Thousands)

Obligations and Nonbudgetary Resources	<b>Unaudited</b>
Obligations Incurred Less: Spending Authority for Offsetting Collections and Adjustments Earned Reimbursements	\$ 121,186
Collected	(116,923)
Receivable from Federal Sources	(236)
Change in Unfilled Orders - (Decreases)/Increases	(18,906)
Financing Imputed for Cost Subsidies	5,397
Exchange Revenue not in the Entity's Budget	66
Total Obligations as Adjusted and Nonbudgetary Resources	(9,416)
<b>Resources that Do Not Fund Net Cost of Operations</b>	
Change in Amount of Goods, Services and Benefits Ordered but	
Yet Received or Provided - (Increases)/Decreases	(2,488)
Change in Unfilled Customers Orders, etc Increases/(Decreases) Costs Capitalized on the Balance Sheet	18,907
General Plant, Property and Equipment	(9,102)
Purchases of Inventory	(93)
Prior Period Adjustments of Capitalized Assets	3,127
Total Resources that Do Not Fund Net Costs of Operations	10,351
Components of Costs of Operations that Do Not Require or Generate Resources	
Depreciation and Amortization	4,767
Total Costs That Do Not Require Resources	4,767
Financing Sources Yet to be Provided	91
Net Costs of Operations	\$ 5,793

# Environmental Protection Agency Required Supplemental Stewardship Information For the Year Ended September 30, 2000 (Dollars in Thousands)

#### INVESTMENT IN THE NATION'S RESEARCH AND DEVELOPMENT:

Public and private sector institutions have long been significant contributors to our nation's environment and human health research agenda. EPA's Office of Research and Development, however, is unique among scientific institutions in this country in combining research, analysis, and the integration of scientific information across the full spectrum of health and ecological issues and across both risk assessment and risk management. Science enables us to identify the most important sources of risk to human health and the environment, and by so doing, informs our priority-setting, ensures credibility for our policies, and guides our deployment of resources. It gives us the understanding and technologies we need to detect, abate, and avoid environmental problems. Science provides the crucial underpinning for EPA decisions and challenges us to apply the best available science and technical analysis to our environmental problems and to practice more integrated, more efficient, and more effective approaches to reducing environmental risks

Among the Agency's highest research priorities is a program to expand the understanding of near- and long-term effects of the environment on children. Another priority is the Particulate Matter (PM) research program, which focuses on review, implementation, and eventual attainment of the National Ambient Air Quality Standards (NAAQS). For FY 2000, the full cost of the Agency's Research and Development activities totaled almost \$601 million. Below is a breakout of the expenses (dollars in thousands):

	<u>FY 1998</u>	<u>FY 1999</u>	<u>FY 2000</u>
Programmatic Expenses	507,828	543,777	541,117
Allocated Expenses	53,322	58,728	59,523

#### INVESTMENT IN THE NATION'S INFRASTRUCTURE:

The Agency makes significant investments in the Nations's drinking water and clean water infrastructure. The investments are the result of three programs: The Construction Grant Program which is being phased out, and two State Revolving Fund (SRF) programs.

<u>Construction Grants Program</u>: During the 1970s and 1980s, the Construction Grants Program was a source of Federal funds, providing more than \$60 billion of direct grants for the construction of public wastewater treatment projects. These projects, which constituted a significant contribution to the nation's water infrastructure, included sewage treatment plants, pumping stations, and collection and intercept sewers, rehabilitation of sewer systems, and the control of combined sewer overflows. The construction grants led to the improvement of water quality in thousands of municipalities nationwide.

Congress set 1990 as the last year that funds would be appropriated for Construction Grants. Projects funded in 1990 and prior will continue until completion. Beyond 1990, EPA shifted the focus of municipal financial assistance from grants to loans that are provided by State Revolving Funds.

<u>State Revolving Funds</u>: The Environmental Protection Agency provides capital, in the form of capitalization grants, to state revolving funds which state governments use to make loans to individuals, businesses, and governmental entities for the construction of wastewater and drinking water treatment infrastructure. When the loans are repaid to the state revolving fund, the collections are used to finance new loans for new construction projects. The capital is reused by the states and is not returned to the Federal Government.

The Agency is also appropriated funds to finance the construction of infrastructure outside the Revolving Funds. These are reported below as Other Infrastructure Grants.

The Agency's expenses related to investments in the Nation's Water Infrastructure are outlined below (dollars in thousands):

	<u>FY 1998</u>	<u>FY 1999</u>	<u>FY 2000</u>
Construction Grants	444,817	414,528	55,766
Clean Water SRF	1,109,017	925,744	1,564,894
Safe Drinking Water SRF	94,936	387,429	588,116
Other Infrastructure Grants	138,363	245,606	212,124
Allocated Expenses	187,649	213,117	266,299

#### **STEWARDSHIP LAND**

The Agency acquires title to certain land and land rights under the authorities provided in Section 104 (J) CERCLA related to remedial clean-up sites. The land rights are in the form of easements to allow access to clean-up sites or to restrict usage of remediated sites. In some instances, the Agency takes title to the land during remediation and returns it to private ownership upon the completion of clean-up.

As of September 30, 2000, the Agency possesses the following land and land rights:

Superfund Sites with Easements	
Beginning Balance	24
Additions	1
Withdrawals	0
Ending Balance	25
Superfund Sites with Land acquired Beginning Balance	20
Additions	3
Withdrawals	0
Ending Balance	23

#### **HUMAN CAPITAL**

Agencies are required to report expenses incurred to train the public with the intent of increasing or maintaining the nation's economic productive capacity. Training, public awareness, and research fellowships are components of many of the Agency's programs, and are effective in achieving the Agency's mission of protecting public health and the environment, but the focus is on enhancing the nation's environmental, not economic, capacity.

The Agency's expenses related to investments in the Human Capital are outlined below (dollars in thousands):

	<u>FY 1998</u>	<u>FY 1999</u>	<u>FY 2000</u>
Training and Awareness Grants	39,131	46,630	49,265
Fellowships	11,084	10,239	9,570
Allocated Expenses	5,273	6,142	6,472

# OIG'S REPORT ON EPA'S FY 2000 FINANCIAL STATEMENTS

The Agency's FY 2000 Annual Report includes a summary of the Office of Inspector General Audit Report on EPA's Fiscal 2000 Financial Statements (2001-1-00107). For a complete copy of the report, please contact:

U.S. Environmental Protection Agency Office of Inspector General Financial Audit Division (2422) 1200 Pennsylvania Avenue, N.W. Washington, DC 20460

**Telephone: 202-260-1397 Facimile: 202-260-1398** 

Electronic version of complete audit report available at: http://www.epa.gov/oigearth

# **Inspector General's Report on EPA's Fiscal 2000 Financial Statements**

The Administrator U.S. Environmental Protection Agency

We have audited the consolidating balance sheet of the U.S. Environmental Protection Agency and its subsidiary funds, the Superfund Trust Fund (Superfund) and All Other Appropriated Funds (All Other) as of September 30, 2000, and the related consolidating statements of net cost and changes in net position, consolidated statement of net cost by goal, combined statement of budgetary resources, combined statement of financing, and consolidated statement of custodial activity for the year then ended. These financial statements are the responsibility of EPA's management. Our responsibility is to express an opinion on these financial statements based upon our audit.

We conducted our audit in accordance with generally accepted auditing standards; the standards applicable to financial statements contained in Government Auditing Standards, issued by the Comptroller General of the United States; and Office of Management and Budget Bulletin 01-02, Audit Requirements for Federal Financial Statements. These standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatements. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

The financial statements include expense of grantees, contractors and other Federal agencies. Our audit work pertaining to these expenses included testing only within EPA. Audits of grants, contracts and interagency agreements performed at a later date may disclose questioned costs of an undeterminable amount at this time. In addition, the United States Treasury collects and accounts for excise taxes that are deposited into the Superfund and Leaking Underground Storage Tank Trust Funds. The United States Treasury is also responsible for investing amounts not needed for current disbursements and transferring funds to EPA as authorized in legislation. Since the United States Treasury, and not EPA, is responsible for these activities, our audit work did not cover these activities.

The Office of Inspector General (OIG) is not independent with respect to amounts pertaining to its operations that are presented in the financial statements. The amounts included for the OIG are not material to EPA's financial statements. The OIG is organizationally independent with respect to all other assets of the Agency's activities.

In our opinion, the consolidating financial statements present fairly the consolidated and individual assets, liabilities, net position, net cost, net cost by goal, changes in net position, budgetary resources, reconciliation of net cost to budgetary obligations, and custodial activity of the U.S. Environmental

<sup>1</sup> The Leaking Underground Storage Tank Trust Fund is included in the All Other Appropriated Funds column of the financial statements.

Protection Agency and its subsidiary funds, the Superfund Trust Fund and All Other Appropriated Funds, as of and for the year ended September 30, 2000, in accordance with generally accepted accounting principles.

# Review of EPA's Required Supplemental Stewardship Information, Required Supplemental Information, and Management Discussion and Analysis

We inquired of EPA's management as to their methods of preparing its RSSI, Required Supplemental Information, and Management Discussion and Analysis, and reviewed this information for consistency with the financial statements. However, our audit was not designed to express an opinion, and accordingly, we do not express an opinion.

We did not identify any material inconsistencies between the information presented in EPA's financial statements and the information presented in EPA's RSSI, Required Supplemental Information, and Management Discussion and Analysis. The January 7, 2000, technical amendments to OMB Bulletin No. 97-01, *Form and Content of Agency Financial Statements*, require agencies to report, as Required Supplemental Information, their intra-governmental assets and liabilities by federal trading partner. We did find that, through no fault of EPA, other Federal agencies were unable to reconcile EPA's reported transactions with their records. Attachment 2 of the OIG's complete audit report on EPA's FY 2000 financial statements provides additional details on this issue.

# **Evaluation of Internal Controls**

As defined by OMB, internal control, as it relates to the financial statements, is a process, effected by the Agency's management and other personnel, designed to provide reasonable assurance that the following objectives are met:

**Reliability of financial reporting** - Transactions are properly recorded, processed, and summarized to permit the timely and reliable preparation of the financial statements and RSSI in accordance with generally accepted accounting principles; and assets are safeguarded against loss from unauthorized acquisition, use, or disposition.

**Reliability of performance reporting** - Transactions and other data that support reported performance measures are properly recorded, processed, and summarized to permit the preparation of performance information in accordance with criteria stated by management.

Compliance with applicable laws and regulations - Transactions are executed in accordance with laws governing the use of budget authority and other laws and regulations that could have a direct and material effect on the financial statements or RSSI; and any other laws, regulations, and government-wide policies identified by OMB.

In planning and performing our audit, we considered EPA's internal controls over financial reporting by obtaining an understanding of the Agency's internal controls, determined whether internal controls had been placed in operation, assessed control risk, and performed tests of controls in order to determine our auditing procedures for the purpose of expressing our opinion on the financial statements. We limited

our internal control testing to those controls necessary to achieve the objectives described in OMB Bulletin No. 01-02, *Audit Requirements for Federal Financial Statements*, as supplemented by an OMB memorandum dated January 4, 2001, *Revised Implementation Guidance for the Federal Financial Management Improvement Act*. We did not test all internal controls relevant to operating objectives as broadly defined by the Federal Managers' Financial Integrity Act of 1982, such as those controls relevant to ensuring efficient operations. The objective of our audit was not to provide assurance on internal controls, and accordingly, we do not express an opinion on internal controls.

Our consideration of the internal controls over financial reporting would not necessarily disclose all matters in the internal control over financial reporting that might be reportable conditions. Under standards issued by the American Institute of Certified Public Accountants, reportable conditions are matters coming to our attention relating to significant deficiencies in the design or operation of the internal control that, in our judgment, could adversely affect the Agency's ability to record, process, summarize, and report financial data consistent with the assertions by management in the financial statements. Material weaknesses are reportable conditions in which the design or operation of one or more of the internal control components does not reduce to a relatively low level the risk that misstatements in amounts that would be material in relation to the financial statements being audited may occur and not be detected within a timely period by employees in the normal course of performing their assigned functions. Because of inherent limitations in internal controls, misstatements, losses, or noncompliance may nevertheless occur and not be detected. However, we noted certain matters discussed below involving the internal control and its operation that we consider to be reportable conditions. However, none of the reportable conditions is believed to be a material weakness.

In addition, we considered EPA's internal control over the RSSI by obtaining an understanding of the Agency's internal controls, determined whether these internal controls had been placed in operation, assessed control risk, and performed tests of controls as required by OMB Bulletin No. 01-02. Our procedures were not designed to provide assurance on these internal controls, and accordingly, we do not express an opinion on such controls.

Finally, with respect to internal control related to performance measures presented in *EPA's Fiscal Year* 2000 Annual Report, Section 1, Overview and Analysis (which addresses requirements for a Management's Discussion and Analysis), we obtained an understanding of the design of significant internal controls relating to the existence and completeness assertions, as required by OMB Bulletin No. 01-02. Our procedures were not designed to provide assurance on internal control over reported performance measures, and accordingly, we do not express an opinion on such controls.

## Reportable Conditions

Reportable conditions are internal control weakness matters coming to the auditor's attention that, in the auditor's judgment, should be communicated because they represent significant deficiencies in the design or operation of internal control that could adversely affect the organization's ability to meet the OMB objectives for financial reporting discussed above.

In evaluating the Agency's internal control structure, we identified seven reportable conditions in the following areas:

#### **Process for Preparing Financial Statements**

The Agency significantly improved the preparation process for its fiscal 2000 financial statements compared to prior year submissions. However, the financial statement preparation process did not provide the needed result, an unqualified audit opinion, without difficulty. Problems were encountered by the Agency in fairly presenting grant accrual amounts. Additionally, some other material items were identified by auditors and then jointly resolved so they would not affect the audit opinion.

#### **Accounting for Capitalized Property**

For a number of years, we have reported that EPA needs to make improvements in its accounting for property. During fiscal 2000, although the Agency continued to take action to correct weaknesses in this area, we determined that the Agency needs to continue its efforts to improve its accounting for property. Specifically, we found that:

- property was not timely or accurately entered in the Fixed Assets Subsystem (FAS);<sup>2</sup>
- there were weaknesses in the Agency's process for reconciling property information in the Integrated Financial Management System (IFMS) with that in FAS;
- financial statement balances for contractor-held property were incorrect;
- contractor-held property transferred was misclassified; and
- real property values were not accurately recorded.

#### **EPA's Process for Reviewing Unliquidated Obligations**

EPA did not timely identify and deobligate inactive unliquidated obligations during its annual review. As a result of weaknesses in the review process, the Agency had to perform an additional "special review" to obtain a more accurate accounting of its unliquidated obligations. This special review identified \$26.5 million of open unliquidated obligations that should have been deobligated by September 30, 2000.

#### **EPA's Interagency Agreement Invoice Approval Process**

Some EPA project officers did not fulfill oversight duties related to reviewing and approving Interagency Agreement (IAG) invoices. We noted deficiencies in this area in prior reports, and we continue to find instances where project offices at EPA's Headquarters and Cincinnati Financial Management Center (CFMC) did not timely approve IAG invoices because they did not receive the supporting cost information from other Federal agencies to substantiate invoice amounts. Additionally, CFMC continued to use the "first-in first-out" accounting basis (charging the first line of accounting) to allocate costs charged on IAGs with multiple goals/subobjectives, which provides limited assurance that costs were charged to the appropriate goals/subobjectives.

<sup>&</sup>lt;sup>2</sup>In late fiscal 1997, the Agency implemented FAS, the Agency's property accountability system, which is integrated with IFMS, the Agency's accounting system.

#### **Documentation and Approval of Journal Vouchers**

Journal and standard vouchers prepared by the Financial Reports and Analysis Branch, OCFO, were not always properly documented and approved. While most of the entries appear to be correct, we are concerned about the vulnerability associated with executing transactions without proper supervisory review and approval.

#### Timely Repayment of Asbestos Loan Debt to Treasury

The Las Vegas Financial Management Center (LVFMC) has not made timely repayments of the Agency's asbestos loan debt to the Department of Treasury. EPA collects payments from loan recipient schools each year but has not made regular repayments to Treasury. The balance, approximately \$6.8 million, represents repayments of principal EPA has collected since fiscal 1997 but has yet to repay, less the amounts paid to Treasury for annual interest.

#### **Automated Application Processing Controls**

We continue to be unable to assess the adequacy of the automated internal control structure as it relates to automated input, processing, and output controls for IFMS. IFMS applications have a direct and material impact on the Agency's financial statements. Therefore, an assessment of each application's automated input, processing, and output controls, as well as compensating manual controls, is necessary to determine the reliance we can place on the financial statements.

Attachment 1 of the OIG's complete audit report of EPA's FY 2000 financial statements describes each of the above reportable conditions in more detail and provides our recommendations and Agency comments on actions that should be taken to correct these conditions. We will also be reporting other less significant matters involving the internal control structure and its operation in a separate management letter.

#### Comparison of EPA'S FMFIA Report with Our Evaluation of Internal Controls

OMB Bulletin No. 01-02, Audit Requirements for Federal Financial Statements, requires us to compare material weaknesses disclosed during the audit with those material weaknesses reported in the Agency's Federal Managers' Financial Integrity Act (FMFIA or Integrity Act) report that relate to the financial statements and identify material weaknesses disclosed by audit that were not reported in the Agency's FMFIA report. This year, for the first time, EPA will report on Integrity Act decisions in EPA's Fiscal Year 2000 Annual Report. For a discussion on Agency reported Integrity Act material weaknesses and corrective action strategy, please refer to EPA's Fiscal Year 2000 Annual Report, Section III, FY 2000 Management Accomplishments and Challenges.

For reporting under FMFIA, material weaknesses are defined differently than they are defined for financial statement audit purposes. OMB Circular A-123, Management Accountability and Control, defines a material weakness as a deficiency that the Agency head determines to be significant enough to be reported outside the Agency.

For financial statement audit purposes, OMB defines material weaknesses in internal control as reportable conditions in which the design or operation of the internal control does not reduce to a relatively low level the risk that errors, fraud, or noncompliance in amounts that would be material in relation to the financial statements or RSSI being audited, or material to a performance measure or aggregation of related performance measures, may occur and not be detected within a timely period by employees in the normal course of performing their assigned functions. Our audit did not disclose any material weakness that was not reported by the Agency as part of the Integrity Act process.

As a part of the fiscal 2000 Integrity Act process, the Agency reported the following material weaknesses that relate to the Agency's financial statements:

**Information System Security** - The Office of Environmental Information (OEI) recognizes that past improvements to its information security program have not resulted in a complete, comprehensive information security program. Therefore, this office is expanding its existing material and Agency weaknesses, Information Systems Security Plans and Cyber Security, to address all security-related deficiencies. Corrective actions are expected to be completed in fiscal 2002.

Construction Grants Close Out - In 1992, EPA designated this area as an Agency weakness, and in 1996 reclassified it as a material weakness due to a concern that lack of Agency-wide attention might result in the loss of resources to properly complete the program. Corrective actions are expected to be completed in fiscal 2002.

## Tests of Compliance with Laws and Regulations

EPA management is responsible for complying with laws and regulations applicable to the Agency. As part of obtaining reasonable assurance about whether the Agency's financial statements are free of material misstatement, we performed tests of its compliance with certain provisions of laws and regulations, noncompliance with which could have a direct and material effect on the determination of financial statement amounts, and certain other laws and regulations specified in OMB Bulletin No. 01-02, Audit Requirements for Federal Financial Statements, as supplemented by an OMB Memorandum dated January 4, 2001, Revised Implementation Guidance for the Federal Financial Management Improvement Act. The OMB guidance requires that we evaluate compliance with Federal financial management system requirements, including the requirements referred to in the FFMIA of 1996. We limited our tests of compliance to these provisions and did not test compliance with all laws and regulations applicable to EPA.

Providing an opinion on compliance with certain provisions of laws and regulations was not an objective of our audit and, accordingly, we do not express such an opinion. There are a number of ongoing investigations involving EPA's grantees and contractors that could reveal violations of laws and regulations, but a determination about these cases has not been made.

None of the noncompliances discussed below would result in material misstatements to the audited financial statements.

#### Federal Financial Management Improvement Act Noncompliance

Under FFMIA, we are required to report whether the Agency's financial management systems substantially comply with the Federal financial management systems requirements, applicable Federal accounting standards, and the United States Government Standard General Ledger at the transaction level. OMB Bulletin No. 01-02, as supplemented by an OMB memorandum dated January 4, 2001, Revised Implementation Guidance for the Federal Financial Management Improvement Act, substantially changed the guidance for determining whether or not an Agency substantially complied with the Federal financial management systems requirements, applicable Federal accounting standards, and the United States Government Standard General Ledger at the transaction level. The document is intended to focus Agency and auditor activities on the essential requirements of FFMIA. The document lists the specific requirements of FFMIA, as well as factors to consider in reviewing systems and for determining substantial compliance with FFMIA. It also provides guidance to Agency heads for developing corrective action plans to bring an Agency into compliance with FFMIA. To meet the FFMIA requirement, we performed tests of compliance with FFMIA section 803(a) requirements and used the OMB guidance, revised on January 4, 2001, for determining substantial noncompliance with FFMIA.

The results of our tests disclosed one instance where the Agency's financial management systems did not substantially comply with the applicable Federal accounting standard. We identified a substantial noncompliance with the SFFAS No. 4 accounting standard for managerial cost accounting. Attachment 2 of the OIG's complete audit report on EPA's FY 2000 financial statements provides a full description of this issue.

In addition to the above instance of substantial noncompliance, we identified two other noncompliances related to reconciliation of intra-governmental transactions and financial system security. However, these noncompliances do not meet the definition of a substantial noncompliance as described in OMB guidance.

Attachment 2 of the OIG's complete audit report on EPA's FY 2000 financial statements provides additional details and provides our recommendations and Agency comments on actions that should be taken on these matters.

#### Appropriation Law Noncompliance

**Disbursements for Multiple Appropriation Grants.** EPA is not complying with appropriation law when making disbursements for grants funded with more than one appropriation. Disbursements for these grants are made using the oldest available funding (appropriation) first which may or may not be the appropriation that benefitted from the work performed. Thus, EPA is not complying with Title 31 U.S.C. 1301 which requires EPA to match disbursements to the benefitting appropriation. A January 13, 2000, Office of General Counsel decision concluded that making disbursements for multiple appropriation grants using the oldest available funding first violates Title 31 U.S.C. 1301 and is an inappropriate method of charging, except in limited situations. This issue was first reported in our fiscal 1994 audit. Attachment 3 of the OIG's complete audit report on EPA's FY 2000 financial statements provides a description of the Agency's corrective action plans and milestones.

## **Prior Audit Coverage**

During previous financial or financial-related audits, weaknesses that impacted our audit objectives were reported in the following areas:

- The Agency's process for preparing financial statements, including the Statements of Budgetary Resources, Financing, and Net Cost.
- Complying with FFMIA requirements.
- Reviewing unliquidated obligations.
- Reporting intra-governmental assets and liabilities by Federal trading partner.
- Accounting for the cost to achieve goals and complying with SFFAS No. 4, Managerial Cost Accounting Concepts and Standards for the Federal Government.
- Accounting for and managing Superfund accounts receivable.
- Accounting for and controlling property.
- Recording accrued liabilities for grants.
- Approving payments for IAGs.
- Documenting EPA's IFMS.
- Complying with Federal financial management system security requirements.
- Accounting for payments for grants funded from multiple appropriations.
- Identifying and allocating indirect costs.
- Reviewing Agency user fees.
- Allocating costs to the Superfund Trust Fund.

Attachment 3, Status of Prior Audit Report Recommendations, of the OIG's complete audit report on EPA's FY 2000 financial statements summarizes the current status of corrective actions taken on prior audit report recommendations in each of these areas.

The Chief Financial Officer, as the Agency's Audit Follow-up Official, oversees EPA's follow-up on audit findings and recommendations, including resolution and implementation of corrective actions. For these prior audits, final action occurs when the Agency completes implementation of the corrective actions to remedy weaknesses identified in the audit.

We acknowledge that many actions and initiatives have been taken to resolve prior financial statement audit issues. We also recognize that the issues we have reported are complex, and require extensive, long-term corrective actions and coordination by the Chief Financial Officer with various Assistant Administrators, Regional Administrators, and Office Directors before they can be completely resolved. A number of issues have been unresolved for a number of years.

In response to our inquiries on actions taken by the OCFO to resolve long outstanding audit recommendations, a representative informed us of a number of efforts that were conducted in fiscal 2000. The OCFO continued efforts to stress the importance of timely and effective audit management practices. The OIG and OCFO held a joint meeting with the Audit Follow-up Coordinators to: (1) reinforce their roles and responsibilities, (2) review expectations for audit follow-up, as laid out in EPA Order 2750, *Audit Management Process*, and (3) reemphasize the importance to Audit Follow-up Coordinators in keeping their managers and the OIG informed of progress.

The OIG will continue to work with the OCFO in helping to resolve all audit issues resulting from our financial statement audits.

## **Agency Comments and OIG Evaluation**

In a memorandum dated February 15, 2001, the Acting Comptroller responded to our draft report. The OCFO generally concurred with our recommendations and has completed or planned a number of corrective actions to implement most or our recommendations. However, the OCFO disagreed with our classifying the process for preparing financial statements as a reportable condition. The OCFO believed that the specific examples depicted are few in number and, in some cases, reflect differences of professional judgement on presentation rather than errors and did not believe the occurrences were serious enough to warrant a reportable condition on the preparation process. Also, the OCFO disagreed with our conclusion that the Agency is in substantial noncompliance with the requirements of SFFAS No. 4, *Managerial Cost Accounting Concepts and Standards for the Federal Government.* The OCFO believes that the Agency is in substantial compliance with the managerial cost accounting standard and therefore did not agree with our recommendations for corrective action and did not believe that a remediation plan under FFMIA would be required.

The OIG has not changed the classification of the process for preparing financial statements as a reportable condition or our conclusion on reporting a substantial noncompliance with the managerial cost accounting standard.

The preparation process for financial statements, while substantially improved from prior years, still is far from routine. Problems identified by our audit included several issues that would have resulted in a qualified audit opinion. We continue to report this matter as a reportable condition because the process should be routine, and should result in draft financial statements without material errors. To a lesser degree than in prior years, auditors are being used as a quality control mechanism. Accordingly, we believe the preparation process warrants reporting as a reportable condition.

Relative to Agency comments on managerial cost accounting, the Agency did not produce or utilize cost per output during fiscal 2000 as required by SFFAS No. 4. Without an indirect cost policy that provides for full cost of outputs, the Agency cannot satisfy the accounting standard. The goal, objective, and stated purposes of SFFAS No. 4 were not being met.

The rationale for our conclusions and a summary of the Agency comments is included in the appropriate sections of this report and the Agency's complete response is included as Appendix II of the OIG's complete audit report on EPA's FY 2000 financial statements.

This report is intended solely for the information and use of the management of EPA, OMB, and Congress, and it is not intended to be and should not be used by anyone other than these specified parties.

Edward Geboshy

Edward Gekosky Divisional Inspector General Financial Audit Division U.S. Environmental Protection Agency February 26, 2001 For more information on EPA's FY 2000 Financial Statements, contact:

Financial Management Division U.S. Environmental Protection Agency Ariel Rios Building 1200 Pennsylvania Avenue, N.W. (2733R) Washington, DC 20460

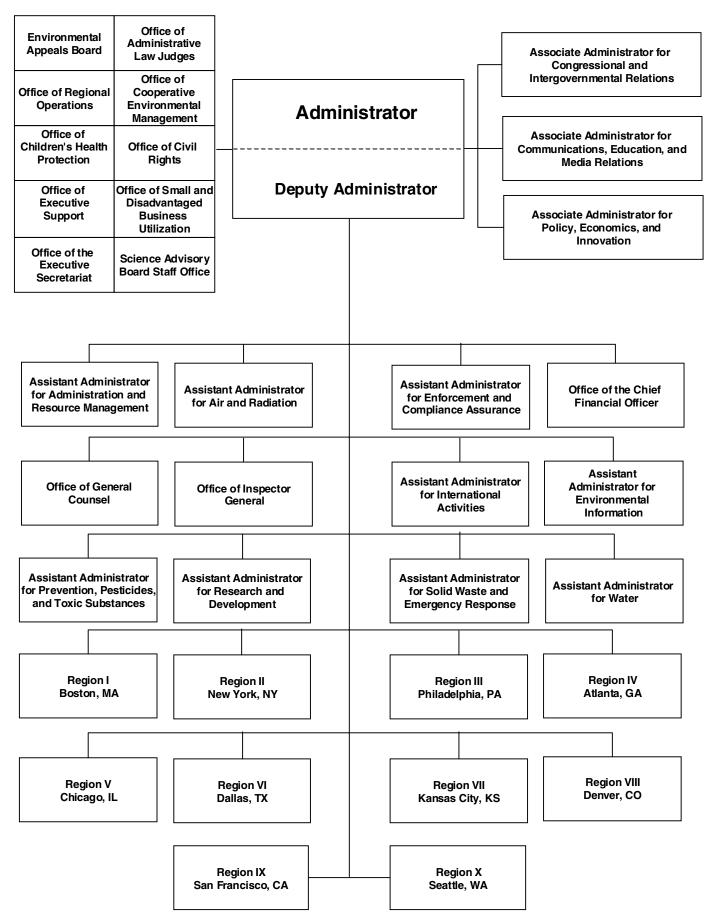
# FY 2000 ANNUAL REPORT

## **APPENDIX**

 $\begin{array}{c} APPENDIX\,A\\ \text{EPA ORGANIZATION CHART} \end{array}$ 

APPENDIX B
LIST OF ACRONYMS

#### U. S. ENVIRONMENTAL PROTECTION AGENCY



#### LIST OF ACRONYMNS

AFS Air Facility Sources System

AIRNOW Computer model displays smog levels
AIRS Aerometric Information Retrieval System

APG Annual Performance Goal
APR Annual Performance Report
AQCD Air Quality Criteria Document

ARP Acid Rain Program

ATS Allowance Tracking System
AQCD Air Quality Criteria Document

AQS Air Quality Subsystem

ASDWA Association of State Drinking Water Administrators

ASTM American Society for Testing and Materials

B&F Buildings and Facilities

BACT Best Available Control Technology

BECC Border Environment Cooperative Commission

BMS Brownfields Management System
BOSC Board of Scientific Counselors

BTU British Thermal Unit

CAA Clean Air Act

CAAA Clean Air Act Amendments

CAFO Concentrated Animal Feeding Operations

CARAT Committee to Advise on Reassessments and Transition

CAS Centers for Applied Science

CASAC Clean Air Scientific Advisory Committee

CASTNet Clean Air Status Trends Network
CCR Consumer Confidence Report

CEC Commission for Environmental Cooperation

CEIS Center for Environmental Information and Statistics

CEMS Continuous Emission Monitoring System

CERCLA Comprehensive Environmental Response, Compensation, and Liability Act

CEQ Council on Environmental Quality

CFC Chlorofluorocarbon

CMAQ Community Multi-scale Air Quality model

CMC Center for Marine Conservation

CO Carbon Monoxide CO, Carbon Dioxide

CPM Core Performance Measure
CRtK Chemical Right-to-Know
CSI Common Sense Initiative
CSO Combined Sewer Overflows
CSRS Civil Service Retirement System

CTAG Certification and Training Assessment Group

CWA Clean Water Act

CWAP Clean Water Action Plan

CWSRF Clean Water State Revolving Fund

DDT Dichlorodiphenyltrichloroethane
DFE Design for the Environment Program

DHHS Department of Health and Human Services

DOE Department of Energy DPD Disinfection By-Products

DWSRF Drinking Water State Revolving Loan Fund

E.O. Executive Order

ECOS Environmental Council of the States
EDC Endocrine-Disrupting Chemical
EDSC Environmental Data Standards Council
EEOC Equal Employment Opportunity Commission

EIA Energy Information Agency

EIMS Environmental Information Management System
EMAP Environmental Monitoring and Assessment Program

EMPACT Environmental Monitoring for Public Access and Community Tracking EOSTAC Endocrine Disruptor Screening and Testing Advisory Committee

EPA Environmental Protection Agency

EPCRA Emergency Planning and Community Right-to-Know Act

EPM Environmental Programs and Management

ERD External Review Draft

ESP Environmental Stewardship Strategies ETV Environmental Technology Verification

FAS Fixed Assets Subsystem

FDA Food and Drug Administration

FECA Federal Employees Compensation Act FERS Federal Employees Retirement System

FTE Full Time Equivalents

FIFRA Federal Insecticide, Fungicide and Rodenticide Act

FPMN Fine Particle Monitoring Network

FMFIA Federal Managers' Financial Integrity Act

FOPA Food Quality Protection Act

FREDS Findings and Regional Elements Data System

FRS Facility Registry Systems
FTE Full Time Equivalents

FY Fiscal Year

GAO General Accounting Office GAP General Assistance Program GCRP Global Change Research Program

GCVTC Grand Canyon Visibility Transport Commission

GIS Geographic Information System

GPRA Government Performance and Results Act

GSA General Services Administration

GWR Ground Water Rule

HCFC Hydrochlorofluorocarbons
HEPA High Efficiency Particulate Air
HPV High Production Volume
HTPS High-Throughput Prescreening

HUD Department of Housing and Urban Development

I-3 Information Integration Initiative

IAG Inter-Agency Agreement

ICIS Integrated Compliance Information System
 IDEA Integrated Data for Enforcement Analysis
 IECP Integrated Error Correction Process
 IGCE Independent Government Cost Estimates

IMPROVE Interagency Monitoring of Protected Visual Environments

IRIS Integrated Risk Information System IRM Information Resources Management

ISEC Integrated Science for Ecosystem Challenges

IT Information Technology
IWI Index of Watershed Indicators

Labs21 Laboratories for the 21st Century
LaMP Lakewide Management Plan

LTESWTR Long-Term Enhanced Surface Water Treatment Rule

LUST Leaking Underground Storage Tank

MACT Maximum Achievable Control Technology

MAIA Mid-Atlantic Integrated Assessment
MIMS Multimedia Integrated Modeling System
MMTCE Metric Tons of Carbon Equivalent
MOBILE Mobile Source Emissions Factor Model

MOR Management Oversight Review

MPG Miles Per Gallon MSW Municipal Solid Waste MTBE Methyl Tertiary Butyl Ether

MYP Multiyear Plan

NAAQS National Ambient Air Quality Standards

NAC National Advisory Committee

NADP National Atmospheric Reposition Program
NAIN National Antimicrobial Information Network
NAFTA North American Free Trade Agreement
NARAP North American Regional Action Plan

NAS National Academy of Science

NAVITEA Northern Arizona University Institute for Tribal Environmental Professionals

NEJAC National Environmental Justice Advisory Group

NEP National Estuary Program

NEPA National Environmental Policy Act

NEPPS National Environmental Performance Partnership System

NETI National Enforcement Training Institute

NHANES National Health and Nutrition Evaluation Survey

NO<sub>2</sub> Nitrogen Dioxide

NOA New Obligational Authority

NOAA National Oceanic and Atmospheric Administration

NO Nitrogen Oxide

NPDES National Pollutant Discharge Elimination System

NPL National Priorities List

NPRD National Pesticide Residue Database

NPS Nonpoint Source

NRDC Natural Resources Defense Council NSATA National-Scale Air Toxics Assessment

NTI National Toxics Inventory

O<sub>3</sub> Ozone

OCFO Office of the Chief Financial Officer

ODS Ozone-Depleting Substance

OECD Organization for Economic Cooperation and Development

OEI Office of Environmental Information
OIG Office of the Inspector General
OMB Office of Management and Budget

OP Organophosphate
OPA Oil Pollution Act

OPPIN Office of Pesticide Program Information Network
OSHA Occupational Safety and Health Administration

OSTP Office of Science and Technology Policy

OTCB/METP Ozone Transport Commission's NO Budget/Multistate Emissions Trading Program

P2 Pollution Prevention

PAH Polycylic Aeromatic Hydrocarbon PBB Poly-Brominated Biphenols

Pb Lead

PBT Persistent Bioaccumulative Toxic

PCB Polychlorinated Biphenyl PCS Permit Compliance System

PE Program Element

PERS Performance and Environmental Results System

PM Particulate Matter
PMN Pre-Manufacture Notice

PNGV Partnership for a New Generation of Vehicles

POP Persistent Organic Pollutant

PPA Performance Partnership Agreement

PPGs Program Performance Grants

PRC Program Results Code

PRO Program and Research Operations
PRP Potentially Responsible Party

QA/QC Quality Action/Quality Control QIC Quality and Information Council

RACs Response Action Contracts
RAP Remedial Action Plan

RCRA Resource Conservation and Recovery Act

RCRAInfo Resource Conservation and Recovery Information System

RED Reregistration Eligibility Decision
REI Reinventing Environmental Information

ReVA Regional Vulnerability Assessment

RFG Reformulated Gasoline RFP Request for Proposal

RGI Regional Geographic Initiative RMF Re-registration Maintenance Fees RMP Risk Management Plan RP Responsible Parties

RPO Regional Planning Organization

RTP Research Triangle Park

S&T Science and Technology SAB Science Advisory Board

SAMI Southern Appalachian Mountains Initiative

SAP Scientific Advisory Panel

SARA Superfund Amendments and Reauthorization Act of 1986

SCAP Superfund Consolidated Accomplishments Plan

SDWA Safe Drinking Water Act

SDWIS Safe Drinking Water Information System SEP Supplemental Environmental Project

SES Senior Executive Service
SFIP Sector Facility Indexing Project
SIP State Implementation Plan

SITE Superfund Innovative Technology Evaluation SLAM State and Local Air Monitoring Station

SO<sub>2</sub> Sulfur Dioxide

SPCC Spill Prevention, Control and Countermeasures

SRI Superfund Redevelopment Initiative

SSCs Superfund State Contracts

STAG State and Tribal Assistance Grants

STAR Science to Achieve Results

TAMSC Tribal Air Monitoring Support Center TEA Tribal Environmental Agreement

TEA-21 Transportation Equality Act for the 21st Century

TIS Tolerance Index System
TMDL Total Maximum Daily Load

TRAC Tolerance Reassessment Advisory Committee

TRI Toxics Release Inventory

TRI-ME Toxics Release Inventory Made Easy
TRIS Toxic Release Inventory System
TSCA Toxic Substances Control Act

USDA U.S. Department of Agriculture

USGCRP U.S. Global Change Research Program

UST Underground Storage Tank

UV Ultraviolet

VMT Vehicle Miles Traveled VOC Volatile Organic Compound

WCF Working Capital Fund WQS Water Quality Standards

WRAP Western Regional Air Partnership

XL eXcellence and Leadership

## PUBLIC ACCESS TO EPA'S PROGRAMS; LOCAL, STATE AND TRIBAL NEWS; AND ENVIRONMENTAL INFORMATION

The public is invited to access <a href="http://www.epa.gov">http://www.epa.gov</a> to obtain the latest environmental news, browse EPA topics, discover what is happening in your community, obtain information on interest groups, research laws and regulations, search specific program areas, learn how to get information, or access EPA's historical database.

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Environmental Management, Human Health, Industry, Pesticides, Pollutants/Toxics,

Pollution Prevention, Research, Treatment & Control, Wastes, Water

Your Community Envirofacts, EnviroMapper, Surf Your Watershed, Community Highlights

Audience Groups Kids, Students, Teachers, Concerned Citizens, Industry, Small Businesses, State, Local,

Tribal, Researchers

Laws & Regulations Major Environmental Laws, Current Legislation in Congress, U.S. Code, Regulations

& Proposed Rules, Code of Federal Regulations

Programs Reinvention Activities, Industry Partnerships, Offices, Regions, Research, Geographic

Focus, State, Local, Tribal, General Interest

Information Sources Libraries, Hotlines, Clearinghouses, Dockets, Publications, Newsletters, Information

Request

About EPA People Locator, Postal Addresses, History, Budget, Contracts, Money Matters,

Annual Performance Report, Management Integrity, Policy Statement and Strategy

Documents, Employment Information, Environmental Terms

## WE WELCOME YOUR COMMENTS!

Thank you for your interest in the Environmental Protection Agency's FY 2000 Annual Report. We welcome your comments on how we can make this report a more informative document for our readers. We are particularly interested in your comments on the usefulness of the information and the manner in which it is presented. Please send your comments to 2000AR.OCFO@epa.gov or write to:

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Office of the Chief Financial Officer (OCFO) (2721A)
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Washington, DC 20460

This report is available on OCFO's homepage at: http://www.epa.gov/ocfo, through EPA's National Service Center for Environmental Publications at 1-800-490-9198, or by ordering online at: http://www.epa.gov/ncepihom.



#### Photo Acknowledgments:

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Arlene Bragg

Office of Chief Financial Officer/Annual Planning and Budget Division

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Margo Lagana

Section III: Fall Foliage at Teddy Roosevelt's Home, Oyster Bay, NY

Kate Donaldson

Section IV: Winter Wonder – The Last Shot, Centreville, VA

Piyachat Terrell